

Learn Time and Work for Maths Section of AILET

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Learn Time and Work for Maths Section of AILET

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.docxpressoPlugin { font-size: 83.35%; } .h5p_layout { box-sizing: content-box !important; }
.h5p_layout *{ float: none; text-align: initial; box-sizing: border-box; } /*to make sure that floating
elements are always inside the document bounds*/ .h5p_layout:after { content: " "; display: block;
height: 0; clear: both; visibility: hidden; } /* a default layout for documents without maste styles */
.h5p_default_layout { margin-top: 3.6rem; margin-left: 8.50464rem; margin-bottom: 3.6rem;
margin-right: 8.50464rem; writing-mode: lr-tb; } /*hack for IE */ wbr:after { content: "\00200B"; }
/*hack to get some extra top margin for anchors if needed*/ .h5p_layout span[id^="_Toc"]{
padding-top: 10px; margin-top: -10px; } /* Remove unwanted numbering styles */ .h5p_layout
.removeNumbering:before{ content: initial !important; display: none; all: initial !important; } /*
give zero default top and bottom paddings for paragraphs*/ .h5p_layout p { color: #000000; line-
height: 1; margin-top: 0; margin-bottom: 0; } .h5p_layout span { color: #000000; font-weight:
normal; } .h5p_layout span.dropcap { color: inherit; font-family: inherit !important; } .h5p_layout
h1, .h5p_layout h2, .h5p_layout h3, .h5p_layout h4, .h5p_layout h5, .h5p_layout h6 { margin-top:
0; margin-bottom: 0; font-family: inherit; font-weight: 500; line-height: 1; color: inherit; } /* give
zero default top and bottom paddings for paragraphs in tables*/ .h5p_layout table p { margin-top:
0; margin-bottom: 0; } .h5p_layout ul, .h5p_layout ol { list-style-type: none; margin-top: 0; margin-
bottom: 0.5em; padding-left: 0; } .h5p_layout ul li, .h5p_layout ol li { list-style-type: none; margin-
top: 0; margin-bottom: 0.5em; } .h5p_layout li p { margin-top: 0; margin-bottom: 0; } .h5p_layout
table { border: none; } .h5p_layout td { vertical-align: top; border: none; } .h5p_layout th {
vertical-align: top; border: none; } .h5p_layout div { margin-bottom: 10pt; } .h5p_layout img {
margin: 0; padding: 0; } .h5p_layout ul ul { margin-top: 0; margin-bottom: 0; } .h5p_layout li {
margin-top: 0; margin-bottom: 0; list-style-type: none !important; } .h5p_layout ul, .h5p_layout ol {
list-style-type: none !important; } .h5p_layout td[data-sorting] p:before, .h5p_layout th[data-
sorting] p:before { content: ' '; padding-right: 16px; background:
url(
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background-position: left center; background-repeat: no-repeat; } .sortDecorator { border-bottom:
3px solid #b70000 !important; } /* This is a spacial class designed to remove unwanted bullets
when a li has ul as its first child*/ .h5p_layout .removeBullet:before { content: none !important; }
/*responsive tables*/ .h5p_layout div.dxoResponsiveTable{ margin: 0 !important; padding: 0
!important; overflow-x: auto !important; overflow-y: hidden; } /* chart tooltips */ .c3-tooltip-
container td.name { white-space: nowrap; } /* External services*/ .h5p_layout iframe { resize:
vertical; border: 1px solid #fff; } .h5p_layout div.youtube { position:relative; padding-
bottom:56.25%; height:0; overflow:hidden; background-color: transparent; } .h5p_layout
div.youtube iframe { resize: none; position:absolute; top:0; left:0; width:100%; height:100%; }
div#h5p_6a7c0eded86b6 ul.LFO1 {counter-reset: ulLFO1_1;margin-left: 0;padding: 0; list-style-
type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 ul {counter-reset:
ulLFO1_2;margin-left: -0.25in;padding: 0; list-style-type: none;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO1 li {text-indent: -0.25in;margin-left: 36pt;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO1 li:before {counter-increment: ulLFO1_1;content:
counter(ulLFO1_1, decimal) ". ";margin-left: -0.25in;display: table-cell;} div#h5p_6a7c0eded86b6
ul.LFO1 ul ul {counter-reset: ulLFO1_3;margin-left: -0.75in;padding: 0; list-style-type: none;font-
size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li {text-indent: -0.25in;margin-left: 72pt;font-
size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li:before {counter-increment:
ulLFO1_2;content: counter(ulLFO1_2, lower-latin) ". ";margin-left: -0.25in;display: table-cell;}
div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul {counter-reset: ulLFO1_4;margin-left: -1.375in;padding:
0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li {text-indent:
-0.125in;margin-left: 108pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li:before
{counter-increment: ulLFO1_3;content: counter(ulLFO1_3, lower-roman) ". ";margin-left: -
0.125in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul ul {counter-reset:
ulLFO1_5;margin-left: -1.75in;padding: 0; list-style-type: none;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li {text-indent: -0.25in;margin-left: 144pt;font-size:
11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li:before {counter-increment:
ulLFO1_4;content: counter(ulLFO1_4, decimal) ". ";margin-left: -0.25in;display: table-cell;}
div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul ul ul {counter-reset: ulLFO1_6;margin-left: -
2.25in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul
li ul li ul li {text-indent: -0.25in;margin-left: 180pt;font-size: 11pt;} div#h5p_6a7c0eded86b6
ul.LFO1 li ul li ul li ul li ul li:before {counter-increment: ulLFO1_5;content: counter(ulLFO1_5,
lower-latin) ". ";margin-left: -0.25in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul
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ul ul ul {counter-reset: ulLFO1_7;margin-left: -2.875in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li {text-indent: -0.125in;margin-left: 216pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li:before {counter-increment: ulLFO1_6;content: counter(ulLFO1_6, lower-roman) ". ";margin-left: -0.125in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul ul ul ul ul {counter-reset: ulLFO1_8;margin-left: -3.25in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 252pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li:before {counter-increment: ulLFO1_7;content: counter(ulLFO1_7, decimal) ". ";margin-left: -0.25in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul ul ul ul ul ul {counter-reset: ulLFO1_9;margin-left: -3.75in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 288pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li ul li:before {counter-increment: ulLFO1_8;content: counter(ulLFO1_8, lower-latin) ". ";margin-left: -0.25in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO1 ul ul ul ul ul ul ul ul ul {counter-reset: ulLFO1_10;margin-left: -4.375in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li ul li ul li {text-indent: -0.125in;margin-left: 324pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO1 li ul li ul li ul li ul li ul li ul li ul li ul li:before {counter-increment: ulLFO1_9;content: counter(ulLFO1_9, lower-roman) ". ";margin-left: -0.125in;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 {margin-left: 0;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 ul {margin-left: -0.25in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li {text-indent: -0.25in;margin-left: 36pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li:before {font-family: Symbol !important;font-size: 10pt !important;content: "\2022";font-family: Verdana;counter-increment: ulLFO2_1;margin-left: -0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul {margin-left: -0.75in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li {text-indent: -0.25in;margin-left: 72pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li:before {font-family: Courier New !important;font-size: 10pt !important;content: "o";counter-increment: ulLFO2_2;margin-left: -0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul {margin-left: -1.25in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li {text-indent: -0.25in;margin-left: 108pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li:before {font-family: Wingdings !important;font-size: 10pt !important;content:
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"\25aa";counter-increment: ulLFO2_3;margin-left: -0.25in;display: table-cell;display: table-cell;}
div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul ul {margin-left: -1.75in;padding: 0; list-style-type:
none;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li {text-indent: -
0.25in;margin-left: 144pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li:before
{font-family: Wingdings !important;font-size: 10pt !important;content: "\25aa";counter-increment:
ulLFO2_4;margin-left: -0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6
ul.LFO2 ul ul ul ul ul {margin-left: -2.25in;padding: 0; list-style-type: none;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 180pt;font-
size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li:before {font-family: Wingdings
!important;font-size: 10pt !important;content: "\25aa";counter-increment: ulLFO2_5;margin-left: -
0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul ul ul ul
{margin-left: -2.75in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6
ul.LFO2 li ul li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 216pt;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li ul li:before {font-family: Wingdings
!important;font-size: 10pt !important;content: "\25aa";counter-increment: ulLFO2_6;margin-left: -
0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul ul ul ul ul
{margin-left: -3.25in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6
ul.LFO2 li ul li ul li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 252pt;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li ul li ul li:before {font-family: Wingdings
!important;font-size: 10pt !important;content: "\25aa";counter-increment: ulLFO2_7;margin-left: -
0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul ul ul ul ul
ul {margin-left: -3.75in;padding: 0; list-style-type: none;font-size: 11pt;} div#h5p_6a7c0eded86b6
ul.LFO2 li ul li ul li ul li ul li ul li ul li ul li {text-indent: -0.25in;margin-left: 288pt;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li ul li ul li ul li:before {font-family: Wingdings
!important;font-size: 10pt !important;content: "\25aa";counter-increment: ulLFO2_8;margin-left: -
0.25in;display: table-cell;display: table-cell;} div#h5p_6a7c0eded86b6 ul.LFO2 ul ul ul ul ul ul ul
ul ul {margin-left: -4.25in;padding: 0; list-style-type: none;font-size: 11pt;}
div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li ul li ul li ul li ul li {text-indent: -
0.25in;margin-left: 324pt;font-size: 11pt;} div#h5p_6a7c0eded86b6 ul.LFO2 li ul li ul li ul li ul li ul
li ul li ul li ul li ul li:before {font-family: Wingdings !important;font-size: 10pt !important;content:
"\25aa";counter-increment: ulLFO2_9;margin-left: -0.25in;display: table-cell;display: table-cell;}
div#h5p_6a7c0eded86b6 p.P1 {border-top: none !important;border-left: none !important;border-
bottom: 0.0138in solid #5B9BD5 !important;border-right: none !important;padding-top: 0in
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!important;padding-left: 0in !important;padding-bottom: 0.0555in !important;padding-right: 0in !important;margin-bottom: 0.2083in !important;line-height: 1 !important;break-before: page !important;text-align: center !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P1 span {hyphenate: false;font-family: Calibri Light;color: #323E4F;letter-spacing: 0.0034in;font-size: 26pt;hyphenate: false;font-weight: bold;} div#h5p_6a7c0eded86b6 p.P2 {text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P2 span {hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P3 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P3 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P4 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P4 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P5 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P5 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P6 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P6 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P7 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P7 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P8 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P8 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P9 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P9 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P10 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P10 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P11 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P11 span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;} div#h5p_6a7c0eded86b6 p.P12 {margin-left: 0.5in !important;text-align: justify !important;line-height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.P12

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span {hyphenate: false;hyphenate: false;font-family: Times New Roman;font-size: 12pt;}
div#h5p_6a7c0eded86b6 p.P13 {margin-left: 0.5in !important;text-align: justify !important;line-
height: 1.5 !important;font-size: 11pt;} div#h5p_6a7c0eded86b6 span.T14 {font-family: Times
New Roman !important;font-size: 12pt !important;} div#h5p_6a7c0eded86b6 span.T15 {font-
family: Times New Roman !important;font-size: 12pt !important;} div#h5p_6a7c0eded86b6
p.Normal {font-size: 11pt;} div#h5p_6a7c0eded86b6 p.Normal span {hyphenate: false;font-size:
11pt;} div#h5p_6a7c0eded86b6 span.DefaultParagraphFont {font-size: 11pt;}
div#h5p_6a7c0eded86b6 p.ListParagraph {margin-left: 0.5in !important;font-size: 11pt;}
div#h5p_6a7c0eded86b6 p.ListParagraph span {hyphenate: false;hyphenate: false;font-size:
11pt;} div#h5p_6a7c0eded86b6 p.Title {border-top: none !important;border-left: none
!important;border-bottom: 0.0138in solid #5B9BD5 !important;border-right: none
!important;padding-top: 0in !important;padding-left: 0in !important;padding-bottom: 0.0555in
!important;padding-right: 0in !important;margin-bottom: 0.2083in !important;line-height: 1
!important;font-size: 11pt;} div#h5p_6a7c0eded86b6 p.Title span {hyphenate: false;font-family:
Calibri Light;color: #323E4F;letter-spacing: 0.0034in;font-size: 26pt;hyphenate: false;}
div#h5p_6a7c0eded86b6 span.TitleChar {font-family: Calibri Light !important;color: #323E4F
!important;letter-spacing: 0.0034in !important;font-size: 26pt !important;}
div#h5p_6a7c0eded86b6 div {font-size: 11pt;} div#h5p_6a7c0eded86b6
span.WW_CharLFO2LVL1 {font-family: Symbol !important;font-size: 10pt !important;}
div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL2 {font-family: Courier New !important;font-
size: 10pt !important;} div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL3 {font-family:
Wingdings !important;font-size: 10pt !important;} div#h5p_6a7c0eded86b6
span.WW_CharLFO2LVL4 {font-family: Wingdings !important;font-size: 10pt !important;}
div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL5 {font-family: Wingdings !important;font-size:
10pt !important;} div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL6 {font-family: Wingdings
!important;font-size: 10pt !important;} div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL7 {font-
family: Wingdings !important;font-size: 10pt !important;} div#h5p_6a7c0eded86b6
span.WW_CharLFO2LVL8 {font-family: Wingdings !important;font-size: 10pt !important;}
div#h5p_6a7c0eded86b6 span.WW_CharLFO2LVL9 {font-family: Wingdings !important;font-size:
10pt !important;} div#h5p_6a7c0eded86b6 p.P13 span {hyphenate: false;hyphenate:
false;hyphenate: false;hyphenate: false;font-size: 11pt;} div#h5p_6a7c0eded86b6 table {margin-
left: 0in;border-collapse: collapse;writing-mode: lr-tb;font-size: 11pt;} div#h5p_6a7c0eded86b6
table tr {height: 0in;keep-together: auto;font-size: 11pt;} div#h5p_6a7c0eded86b6 table td, table
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th {background-color: transparent;vertical-align: top;wrap-option: wrap;font-size: 11pt;}
div#h5p_6a7c0eded86b6 p {keep-with-next: auto;keep-together: auto;widows: 2;orphans:
2;break-before: auto;border: none;text-align: left;writing-mode: lr-tb;margin-bottom:
0.1111in;line-height: 1.07;background-color: transparent;font-size: 11pt;}
div#h5p_6a7c0eded86b6 p span {font-family: Calibri;font-weight: normal;font-style: normal;text-
transform: none;font-variant: normal;text-shadow: none;letter-spacing: normal;font-size:
11pt;background-color: transparent;text-decoration: none;text-decoration-color: font-
color;language: en;country: IN;hyphenate: true;}
```

Learn Time and Work for Maths Section of AILET‘Time and work’ is used to calculate how much time will be taken to finish a work and how much work can be finished in a given time The concept of time and work is although widely used in our daily lives, it could often be considered as a part that is a little difficult and confusing to solve. But remember, there are certain tricks and formulas that can make it easy to solve questions from this concept quite quickly and correctly. The following points given if kept in mind all the time, you will never ever lose a mark from this part. If a man completes a work in T days or unit time, the work done in 1 day or in one unit time is $1/T$. If the work done in 1 day is given, then the total no. of days taken to finish the entire work is $1/\text{work done in one day}$. If a person does $1/w$ work in one unit of time, then the unit of time required to complete the entire work is w days. If A completes a work in x days, then the work done in one day is $(1/x)$ of the total work. If B finishes $1/y$ of the total work in 1 day, then the work will be completed in y days. Therefore, if working together, both can finish $1/z$ ($1/x + 1/y = 1/z$) work in one day and complete the task in ‘ z ’ days. If a person A does a work in ‘ a ’ days and person B can finish the work in ‘ b ’ days, they can finish the work together in $ab/(a+b)$ days. If a person A does a work in ‘ a ’ days, B can finish the work in ‘ b ’ days and Person C can finish it in ‘ c ’ days they can finish the work together in $abc/(a+b+c)$ days. The work done is proportional to time if the number of persons doing it, is constant. The time is inversely proportional to the number of men if the amount of work is fixed. Sometimes there are specific questions involving cistern and water tank. Always remember that there are two pipes connected to a water tank. One pipe which fills up the water is called inlet and one which throws the water out is called the outlet. If a pipe fills the water tank in X hours, then in one hour it will fill $1/X$ of the tank. Therefore the work done in pipe in one hour is $1/x$. If an outlet empties a tank in Y hours, then it will empty $1/Y$ tank in one hour and therefore the work done by the outlet in one hour is $(-1/Y)$ i.e. negative work. (function(\$) { //footnotes \$('defaultNote').children(":first").css('cursor', 'pointer'); \$('defaultNote').children(":first").click(function(){ var gotoID = '#' + \$(this).parent().attr('id');

```
$( 'html, body').animate( { scrollTop: $('a[href="' + gotoID + '"').offset().top - 60, }, 250, 'linear' )
}); }(jQuery)); var numFormat = ","; (function( $ ) { "use strict"; //do some cleaning on load var
sortCells = $('td[data-sorting], th[data-sorting]'); sortCells.each(function(){ var first =
$(this).text().trim().charAt(0); if (first == '@'){ var oldHTML = $(this).html(); var newHTML =
oldHTML.replace('@', ""); $(this).html(newHTML); } }); function sortingTable(node, pos, orderBy){
var rows = node.children('tbody').children('tr').get(); rows.sort(function(a, b) { var X =
$(a).children('td').eq(pos).text().toUpperCase(); var Y =
$(b).children('td').eq(pos).text().toUpperCase(); if (numFormat != ',.'){ //we are dealing with a
different locale and we need to do some //transformation in numbers X = convert2number(X); Y =
convert2number(Y); } else { X = X.replace(/,/g, "").replace(/ /g, ""); Y = Y.replace(/,/g, "").replace(/
/g, ""); } var currencies = ['$', '¥', '£', '€']; var arrayLength = currencies.length; var XX = X; var YY
= Y; for (var i = 0; i < arrayLength; i++) { XX = XX.replace(currencies[i], ""); YY =
YY.replace(currencies[i], ""); } if (!isNaN(XX) && !isNaN(YY)){ var floatXX = parseFloat(XX); var
floatYY = parseFloat(YY); return -(floatYY-floatXX) * orderBy; } else if (!isNaN(XX) && isNaN(YY)){
return -1 * orderBy; } else if (isNaN(XX) && !isNaN(YY)){ return orderBy; } else { if(X < Y) { return -
1 * orderBy; } if(X > Y) { return 1 * orderBy; } return 0; } }); $.each(rows, function(index, row) {
node.children('tbody').append(row); }); } function removeTableCellDecoration() { $("td[data-
sorting], th[data-sorting]").removeClass('sortDecorator'); } //unbind the click event just in case we
are loading more than one document $("td[data-sorting], th[data-sorting]").off('click'); $("td[data-
sorting], th[data-sorting]").click(function(){ removeTableCellDecoration();
$(this).addClass('sortDecorator'); //get desired ordering var ordering = $(this).attr('data-
sortOrdering'); if (ordering == 'ASC'){ var orderBy = -1; $(this).attr('data-sortOrdering', 'DESC'); }
else { var orderBy = 1; $(this).attr('data-sortOrdering', 'ASC'); } var cellPosition =
$(this).prevAll().length; var table = $(this).parents('table:first'); sortingTable(table, cellPosition,
orderBy); }); function convert2number(str) { str = str.trim(); if (str.match(/^\\d+\\/)) { //we have to
take special care when the thousand separators are '.' var result_0 = str.replace(/\\./g, '@_'); var
result_1 = result_0.replace(window.numFormat[0], '.'); var result = result_1.replace(/@_\\/g, "");
result .replace(/ /g, ""); return result; } else { return str; } } }(jQuery));
```

[Read the theory on Simple and Compound Interest here.](#)

[Read our other posts on Quantitative Techniques Question Pattern and Test Papers.](#)

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