

Grade 7 Worksheet 11a page 34	Grade 7 Worksheet 11b page 36
<p>1a. 2cm    b. 1cm                      c. 6cm    d. 3cm                      e. 3cm</p> <p>2a.</p> <ul style="list-style-type: none"> <li>• P-12cm A- <math>8cm^2</math></li> <li>• L-8cm W- 4cm</li> <li>• P-24cm A-<math>32cm^2</math></li> </ul> <p>b.</p> <ul style="list-style-type: none"> <li>• P-10cm A-<math>6cm^2</math></li> <li>• L-9cm W-6cm</li> <li>• P-30cm A-<math>54cm^2</math></li> </ul> <p>c.</p> <ul style="list-style-type: none"> <li>• P-18cm A-<math>20cm^2</math></li> <li>• L-20cm W-16cm</li> <li>• P-72cm A-<math>320cm^2</math></li> </ul> <p>d.</p> <ul style="list-style-type: none"> <li>• P-18cm A-<math>18 cm^2</math></li> <li>• L- 12cm W-6cm</li> <li>• P-36cm A-<math>72cm^2</math></li> </ul> <p>e.</p> <ul style="list-style-type: none"> <li>• P-26cm A-<math>42cm^2</math></li> <li>• L-21cm W-18cm</li> <li>• P-78cm A-<math>378 cm^2</math></li> </ul>	<p>Learner's own sketches.</p> <p>9. No</p> <p>10. Yes</p>
Grade 7 Worksheet 12 page 38	Grade 7 Worksheet 13 page 40
<p>1a. Divide it into two shapes that you are able to work with E.g. 1 rectangle and 1 square.</p> <p>b. P-16cm                      c. A- <math>7cm^2</math></p> <p>2a. P-36cm A-<math>80cm^2</math>                      b. P-35cm A-<math>75cm^2</math></p> <p>3. Answers possibly differ.</p> <p>4. P-22cm A-<math>30cm^2</math></p> <p>5a. 4cm    b. 3cm    c. 3cm</p> <p>6.</p> <ul style="list-style-type: none"> <li>• L-6cm W-3cm H-2cm Volume = <math>36cm^3</math></li> <li>• L-8cm W-2.5cm H-3cm Calculations-  <math>l \times h \times w</math> Volume = <math>60cm^3</math></li> </ul> <p>7. Answers possibly differ. E.g. L-12cm B-25cm H-7cm</p>	<p>1.</p> <ul style="list-style-type: none"> <li>• 16:30:01</li> <li>• 1, 15, 25, 16:45:25</li> <li>• 1:27;17, 17:57:17</li> <li>• 0:55:45, 18:40:45</li> <li>• 1, 15, 9, 15:05:09</li> </ul> <p>2. 27:49:03</p> <p>3.</p> <ul style="list-style-type: none"> <li>• Days- 10.5, 14, 17.5, 21, 24.5, 28, 31.5, 35, 45.5, 49</li> <li>• Hours- 252, 336, 470, 504, 588, 672, 756, 840, 1092, 1172</li> <li>• Minutes- 10080, 20160, 25200, 30240, 35280, 40320, 45360, 50400, 65520, 70320</li> </ul>

	<p>4a. 260, 1820                  b. 1326, 9282                  5a. 1000 Years    b. 525 Years                  6. Answers possibly differ.                  a. 24                  b. Botswana and Mozambique                  c. Egypt and Nigeria</p>
Grade 7 Worksheet 14a page 42	Grade 7 Worksheet 14b page 44
<p>1a. -5    b. 0    c. 9    d. 2    e. -8                  f. -8    g. 9    h. -5    i. 1. -9                  2a. 5    b. 9    c. 2    d. 10    e. 3                  3a. 10    b. 100    c. 1000    d. 100                  e.  <ul style="list-style-type: none"> <li>• 90, 9, 0.09, 0.00009</li> <li>• 3000, 300, 3, 0.003</li> <li>• 2 000 000, 2000 00, 2000, 2</li> <li>• 10500, 1050, 10.5, 0.0105</li> <li>• 3600, 360, 3.6, 0.0036</li> </ul>                 f. 585km</p>	<p>4a. 1000    b. 1000    c. 1000    d. 1 000 000                  e.  <ul style="list-style-type: none"> <li>• 3500 000, 3500, 3.5, 0.0035</li> <li>• 2 000 000, 2000, 2, 0.002</li> <li>• 2 500 000, 2500, 2.5, 0.0025</li> <li>• 3 000 000 000, 3 000 000, 3000, 3</li> <li>• 5 000 000, 5000, 5, 0.005</li> </ul>                 f. 500.55kg                  5a. 1000    b. 1000    c. 1 000 000                  d.  <ul style="list-style-type: none"> <li>• 5250, 5.25, 0.00525, 1050</li> <li>• 4500, 4.5, 0.0045, 900</li> <li>• 3 000 000, 3000, 3, 6 000 00</li> <li>• 9999, 9.999, 0.009999, 1999.8</li> <li>• 1750, 1.75, 0.00175, 350</li> </ul>                 e.  <ul style="list-style-type: none"> <li>• 375 000 <math>cm^3</math></li> <li>• 375</li> </ul> </p>
Grade 7 Worksheet 15 page 46	Grade 7 Worksheet 16 page 48
<p>Questions 1-7. Answers possibly differ, including practical work by learners.</p>	<p>1a.  <ul style="list-style-type: none"> <li>• 350 000</li> <li>• 550 000</li> <li>• 450 000</li> <li>• 600 000</li> </ul>                 b. Answers possibly differ.                  c. Organise and record data.                  3.  <ul style="list-style-type: none"> <li>• Purple- 14 Tallies of 5. Frequency = 70</li> <li>• Blue- 13 Tallies of 5. Frequency = 65</li> <li>• Green- 11 Tallies of 5 and 1 Tally of 4. Frequency = 59</li> <li>• Yellow- 7 Tallies of 5 and 1 Tally of 2. Frequency = 37</li> <li>• Black- 3 Tallies of 5 and 1 Tally of 2. Frequency = 17</li> </ul>                 4. Answers possibly differ.</p>

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<p>1b. <math>31 + 62</math>    c. <math>5 \times 4</math>                      d. <math>9 \times 7</math>    e. <math>9 \times 8</math>                      f. <math>12 \times 15</math>                      g. Answers possibly differ. E.g. <math>1 + 10 = 10 + 1</math> and <math>2 \times 16 = 16 \times 2</math>                      2a. <math>b + a</math>    b. <math>d \times c</math>                      c. <math>n \times m</math>    d. <math>h + g</math>                      e. <math>2 \times p</math>    f. <math>t \times s</math>                      3a. <math>3 + 2 = 2 + 3</math>                      b. <math>3 \times 2 = 2 \times 3</math>                      c. <math>5 \times 2 = 2 \times 5</math>                      d. <math>5 + 2 = 2 + 5</math>                      e. <math>5 \times 3 = 3 \times 5</math>                      f. <math>5 + 3 = 3 + 5</math>                      4a. <math>3 \times 4 = 4 \times 3</math>    b. <math>6 \times 5 = 5 \times 6</math>                      c. <math>2 \times 6 = 6 \times 2</math>    d. <math>1 \times 4 = 4 \times 1</math></p> <div data-bbox="451 468 756 722" style="background-color: #663399; color: white; padding: 5px;"> <p>Errata- WK 17                      Question 3a. It should be <math>c + a = a + c</math>                      Question 3b. It should be <math>c \times a = a \times c</math></p> </div>	<p>1b. <math>7 + (3 + 1) = 11</math>    c. <math>10 \times (8 \times 4) = 320</math>                      d. <math>5 \times (4 \times 2) = 40</math>    e. <math>3 \times (11 \times 2) = 66</math>                      f. <math>2 \times (12 \times 4) = 96</math>                      2b. <math>m + (n + c) b</math>    c. <math>g \times (h \times i)</math>                      d. <math>c \times (d \times f)</math>    e. <math>k \times (z \times d)</math>                      f. <math>a + (d + v)</math>    g. <math>a \times (c \times d)</math>                      h. <math>k \times (l \times m)</math>    i. <math>v + (c + r)</math>                      3a. <math>(3 + 2) + 4 = 3 + (2 + 4) = 9</math>                      b. <math>(4 \times 2) \times 3 = 2 \times (4 \times 3) = 24</math>                      c. <math>4 \times (3 \times 2) = 3 \times (4 \times 2) = 24</math>                      d. <math>4 + (3 + 2) = (4 + 3) + 2 = 9</math>                      4a. <math>(2 + 1) + 7 = 2 + (1 + 7) = 10</math>                      b. <math>(7 \times 1) \times 2 = 1 \times (7 \times 2) = 14</math>                      c. <math>7 \times (2 \times 1) = 2 \times (7 \times 1) = 14</math>                      d. <math>7 + (2 + 1) = (7 + 2) + 1 = 10</math></p>
Grade 7 Worksheet 19 page 54	Grade 7 Worksheet 20 page 56
<p>1a. <math>3 \times 3 + 3 \times 9 = 3(3 + 9)</math>                      b. <math>2 \times 4 + 2 \times 6 = 2(4 + 6)</math>                      c. <math>4 \times 2 + 4 \times 8 = 4(2 + 8)</math>                      d. Draw diagrams for the operations (i and ii)                      2a. <math>3 \times 4 + 3 \times 2</math>    b. <math>10 \times 2 + 10 \times 3</math>                      c. <math>5 \times 3 + 5 \times 1</math>                      3a. <math>3(2 + 5)</math>    b. <math>6(1 + 4)</math>                      c. <math>3(2 - 1)</math>                      4a. <math>2(3 + 4) = 2 \times 3 + 2 \times 4</math>                      b. <math>4(2 + 3) = 4 \times 2 + 4 \times 3</math>                      c. <math>3(4 + 2) = 3 \times 4 + 3 \times 2</math></p>	<p>1b. <math>7 + 0 = 7, 7 \times 1 = 7</math>    c. <math>9 + 0 = 9, 9 \times 1 = 9</math>                      d. <math>100 + 0 = 100, 100 \times 1 = 100</math>                      e. <math>34 + 0 = 34, 34 \times 1 = 34</math>                      f. <math>2,5 + 0 = 2,5, 2,5 \times 1 = 2,5</math>                      g. <math>0,1 + 0 = 0,1, 0,1 \times 1 = 0,1</math>                      2a. b    b. 0    c. e                      3b. <math>3 + (2 + 9)</math>    c. <math>4 + (3 + 8)</math>    d. <math>5 \times 9 - 5 \times 8</math>                      e. <math>12 + 9</math>    f. <math>5 \times (2 \times 11)</math>                      4a. True    b. False    c. True                      d. True    e. True    f. True                      5a. <math>2 + 8 = 8 + 2</math>    b. <math>5 + (8 + 2) = (5 + 8) + 2</math>                      c. <math>2 + 0 = 2</math>    d. <math>5(2 + 8) = 5 \times 2 + 5 \times 8</math>                      e. <math>2(8 - 5) = 2 \times 8 + 2 \times 5</math>    f. <math>5 \times 1 = 5</math>                      6. Associative property of numbers- <math>a + b = b + a</math>                      Commutative property of numbers - <math>(a + b) + c = a + (b + c)</math>                      Distributive property of numbers- <math>a(b + c) = a \times b + a \times c</math>                      Zero as the identity of addition- <math>a + 0 = a</math>                      One as the identity of multiplication- <math>a \times 1 = a</math></p>

Grade 7 Worksheet 21 page 58	Grade 7 Worksheet 22 page 60
<p>1a. 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48  b. 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84  c. 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60  d. 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96  e. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24  f. 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108</p> <p>2a.</p> <ul style="list-style-type: none"> <li>• 5, 10</li> <li>• 10</li> <li>• LCM: 10</li> </ul> <p>b.</p> <ul style="list-style-type: none"> <li>• 5, 10, 15, 20, 25, 30</li> <li>• 6, 12, 18, 24, 30</li> <li>• LCM: 30</li> </ul> <p>c.</p> <ul style="list-style-type: none"> <li>• 90, 180</li> <li>• 20, 40, 60, 80, 100, 120, 140, 160, 180</li> <li>• LCM: 180</li> </ul> <p>3a.</p> <ul style="list-style-type: none"> <li>• 2, 4, 6, 8</li> <li>• 8</li> <li>• LCM: 8</li> </ul> <p>b.</p> <ul style="list-style-type: none"> <li>• 3, 6</li> <li>• 6</li> <li>• LCM: 6</li> </ul> <p>c.</p> <ul style="list-style-type: none"> <li>• 5, 10, 15</li> <li>• 3, 6, 9, 12, 15</li> <li>• LCM: 15</li> </ul> <p>d.</p> <ul style="list-style-type: none"> <li>• 4, 8</li> <li>• 8</li> <li>• LCM: 8</li> </ul> <p>e.</p> <ul style="list-style-type: none"> <li>• 70, 140, 210, 280, 350, 420</li> <li>• 60, 120, 180, 240, 300, 360, 420</li> <li>• LCM: 420</li> </ul> <p>f.</p> <ul style="list-style-type: none"> <li>• 100, 200, 300, 400, 500</li> <li>• 125, 250, 375, 500</li> <li>• LCM: 500</li> </ul>	<p>1. Tick the numbers that are divisible by 2, 3, 4, 5 and 10. You can have more than one answer.</p> <p>2a. Yes    b. Yes  c. Yes    d. Yes  e. Yes, except for 3</p> <p>3a. 1 x 2, 2 x 6 and 3 x 4  b. 1 x 36, 2 x 18, 3 x 12, 4 x 9 and 6 x 6  c. 1 x 42, 2 x 21, 3 x 14 and 6 x 7  d. 1 x 24, 2 x 12, 3 x 8, and 4 x 6  e. 1 x 64, 2 x 32, 4 x 16, and 8 x 8</p> <p>4. Answers possibly differ.</p> <p>5a.i. 1 x 18, 2 x 9 and 3 x 6  ii. 1, 2, 3, 6, 9, 18  iii. F18  iv. 1, 2, 3, 6, 9, 18  b.i. 1 x 25, 5 x 5  ii. 1, 5, 25  iii. F25  iv. 1, 5, 25</p> <p>6a.i.  1, 2, 4, 8  1, 2, 4, 8, 16  ii. CF: 1, 2, 4, 8  iii. HCF: 8  b.i.  1, 3  1, 2, 3, 4, 6, 12  ii. CF: 1, 3  iii. HCF: 3  c.i.  1, 3  1, 3, 9  ii. CF: 1, 3  iii. HCF: 3</p> <p>7. Complete the table.</p>

Grade 7 Worksheet 23 page 62	Grade 7 Worksheet 24 page 64
<p>1a. <math>\frac{3}{7} : \frac{4}{7}</math>    b. <math>\frac{5}{12} : \frac{7}{12}</math>  c. <math>\frac{6}{14} : \frac{8}{14}</math>    d. <math>\frac{3}{12} : \frac{9}{12}</math>  e. <math>\frac{1}{3} : \frac{2}{3}</math>    f. <math>\frac{7}{16} : \frac{9}{16}</math></p> <p>2a. 4% : 6%  b. 2% : 8%  c. 5% : 5%  d. 48% : 52%  e. 40% : 60%  f. 25% : 75%</p> <p>3.</p> <ul style="list-style-type: none"> <li>• <math>\frac{6}{10} : \frac{4}{10}</math></li> <li>• 0,6 : 0,4</li> <li>• 60% : 40%</li> </ul> <p>b.</p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{3} : \frac{2}{3}</math></li> <li>• 0,33 : 0,67</li> <li>• 33% : 67%</li> </ul>	<p>1a. 8    b. 12  c. 6    d. 8  e. 40  2a. R2/kilogram  b. 10 metres/second  c. R25/ litre  d. 0.5 kilometres/minute  3a. 30 leaves/hour  b. 10 kilometres / litre  c. 1.8 goals/match  d. 480 metres  4. Answers possibly differ.</p>