



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA




Tshwane South
TVET College

"achieve the future"




UNIT 1 LINEAR MEASUREMENT

Exercise 1.1


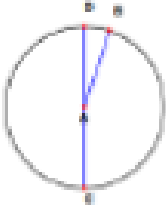
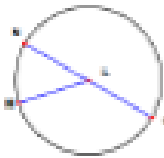
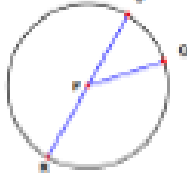
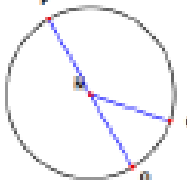
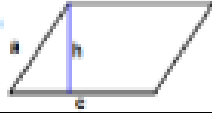
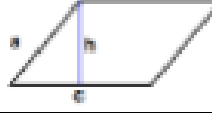
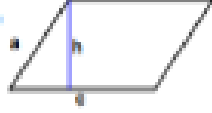

	Convert the following measurements File all your work behind this page.		
a. $37\text{ cm} =$	mm	b. $927\text{ m} =$	cm
c. $598\text{ km} =$	cm	d. $20\text{ m} =$	mm
e. $914\text{ m} =$	km	f. $58\text{ m} =$	cm
g. $863\text{ m} =$	cm	h. $7465\text{ m} =$	km
i. $18\text{ cm} =$	mm	j. $190\text{ cm} =$	km
Solve the following word problems.			
1. John rode 2 kilometres on his bike. His sister Sally rode 3000 meters on her bike. Who rode the furthest (answer in km)?			
2. Jessica is measuring two pieces of wood. The first piece of wood is 30 cm long. The second piece of wood is 500 mm long. How long are the two line segments together? (answer in cm)			
3. Dumi grew 10 centimetres in 1 year. He is now 1.6 m tall. How tall was he 1 year ago?			
4. Jane buys a reel of thread for sewing. There are 10 m of thread on the reel. She uses 210 cm . How much is left on the reel in centimetres?			

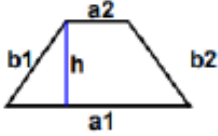
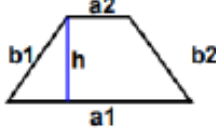
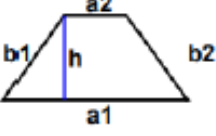
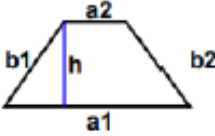
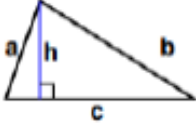
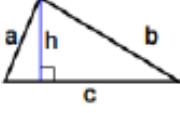
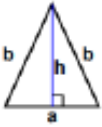
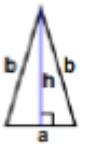
Exercise 1.2

	Convert the following measurements File all your work behind this page.		
a. $57\text{ cm} =$	mm	b. $891\text{ m} =$	cm
c. $50\text{ km} =$	cm	d. $20\text{ cm} =$	mm
e. $184\text{ m} =$	km	f. $49\text{ m} =$	cm
g. $235\text{ m} =$	cm	h. $10453\text{ m} =$	km
i. $23\text{ cm} =$	mm	j. $10\text{ cm} =$	km
Solve the following word problems.			
1. Jabu measured a line for his art project. It is 200 millimetres long. How many centimetres is the line?			
2. Ming is moving to a new house. Her old house is 3 kilometres from her new house. How many meters is the old house from the new house?			
3. Musa has a 1.2 m long piece of wood. He wants to cut it into 3 equal lengths. How long should each piece be in $millimetres$?			
4. Jessica's shoebox is 20 centimetres long and 10 centimetres wide. How many more millimetres is the length of the shoebox than the width?			


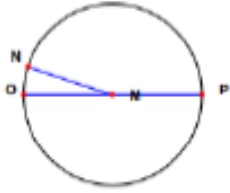
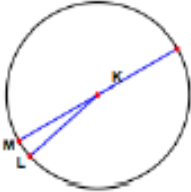
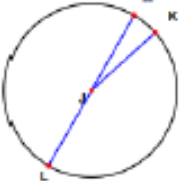
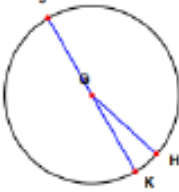
UNIT 2: THE PERIMETERS AND AREAS OF TWO-DIMENSIONAL FIGURES

Exercise 2.1



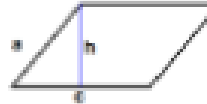



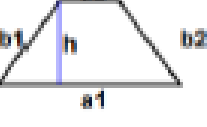
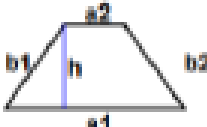
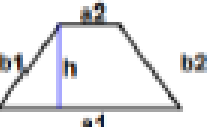
	<p>Use the π - key on your calculator</p> <p>File all your work behind this page.</p>
<p>1.</p>  <p>Radius:</p> <p>Diameter: 4 cm</p> <p>Circumference:</p>	<p>2.</p>  <p>Radius:</p> <p>Diameter 28 mm</p> <p>Circumference:</p>
<p>3.</p>  <p>Radius 3 cm</p> <p>Diameter:</p> <p>Circumference:</p>	<p>4.</p>  <p>Radius 6 mm</p> <p>Diameter:</p> <p>Circumference:</p>
<p>5. A square has a side length of 8 cm. Calculate the perimeter.</p>	<p>6. A square has sides of 45 mm. Calculate the perimeter.</p>
<p>7. A rectangle is 4 m wide and 2 m high. What is its perimeter?</p>	<p>8. A rectangle is 8 m wide and 6 m high. What is the perimeter?</p>
<p>9.</p> <p>$a = 61,53$ cm; $c = 94$ cm</p>  <p>Calculate the perimeter.</p>	<p>10.</p> <p>$a = 59,26$ mm; $c = 90$ mm</p>  <p>Calculate the perimeter.</p>
<p>11.</p> <p>$a = 60,8$ mm; $c = 84$ mm</p>  <p>Calculate the perimeter.</p>	<p>12.</p> <p>$a = 51,32$ cm; $c = 99$ cm</p>  <p>Calculate the perimeter.</p>

<p>13. $a_1 = 92 \text{ cm}; a_2 = 31 \text{ cm};$ $b_1 = 51,59 \text{ cm}; b_2 = 52,23 \text{ cm}$</p> <p>Calculate the perimeter.</p> 	<p>14. $a_1 = 90 \text{ mm}; a_2 = 39 \text{ mm};$ $b_1 = 57,24 \text{ mm}; b_2 = 46,29 \text{ mm}$</p> <p>Calculate the perimeter.</p> 
<p>15. $a_1 = 95 \text{ mm}; a_2 = 45 \text{ mm};$ $b_1 = 58,16 \text{ mm}; b_2 = 48,2 \text{ mm}$</p> <p>Calculate the perimeter.</p> 	<p>16. $a_1 = 97 \text{ cm}; a_2 = 46 \text{ cm};$ $b_1 = 64,13 \text{ cm}; b_2 = 48,74 \text{ cm}$</p> <p>Calculate the perimeter.</p> 
<p>17. $a = 50,99 \text{ mm}; b = 91,41 \text{ mm};$ $c = 95 \text{ mm}$</p> <p>Calculate the perimeter.</p> 	<p>18. $a = 45,6 \text{ cm}; b = 81,85 \text{ cm}; c = 88 \text{ cm}$</p> <p>Calculate the perimeter.</p> 
<p>19. $a = 59 \text{ cm}; b = 74 \text{ cm}$</p> <p>Calculate the perimeter.</p> 	<p>20. $a = 41 \text{ cm}; b = 80 \text{ cm}$</p> <p>Calculate the perimeter.</p> 

Exercise 2.2

	<p>Use the π – key on your calculator File all your work behind this page.</p>
<p>1.</p>  <p>Radius: Diameter: 10 cm Circumference:</p>	<p>2.</p>  <p>Radius: Diameter 8 mm Circumference:</p>
<p>3.</p>  <p>Radius: 8 cm Diameter: Circumference:</p>	<p>4.</p>  <p>Radius 12 mm Diameter: Circumference:</p>
<p>5. A square has a side length of 10 cm. Calculate the perimeter.</p>	<p>6. A square has side length of 64 mm. Calculate the perimeter.</p>
<p>7. A rectangle is 5 m wide and 3 m high. Calculate the perimeter.</p>	<p>8. A rectangle is 10 m wide and 6 m high. Calculate the perimeter.</p>

Exercise 2.3

	<p>Use the π - key on your calculator</p> <p>File all your work behind this page.</p>
<p>1.</p> <p>$a = 65,18 \text{ cm}; c = 91 \text{ cm}$</p>  <p>Calculate the perimeter.</p>	<p>2.</p> <p>$a = 54,46 \text{ mm}; c = 95 \text{ mm}$</p>  <p>Calculate the perimeter.</p>
<p>3.</p> <p>$a = 46,74 \text{ mm}; c = 80 \text{ mm}$</p>  <p>Calculate the perimeter.</p>	<p>4.</p> <p>$a = 51,53 \text{ mm}; c = 83 \text{ mm}$</p>  <p>Calculate the perimeter.</p>
<p>5.</p> <p>$a1 = 89 \text{ cm}; a2 = 47 \text{ cm};$ $b1 = 66,04 \text{ cm}; b2 = 50,01 \text{ cm}$</p>  <p>Calculate the perimeter.</p>	<p>6.</p> <p>$a1 = 80 \text{ cm}; a2 = 43 \text{ cm};$ $b1 = 65,6 \text{ cm}; b2 = 52,09 \text{ cm}$</p>  <p>Calculate the perimeter.</p>
<p>7.</p> <p>$a1 = 87 \text{ cm}; a2 = 30 \text{ cm};$ $b1 = 60,32 \text{ cm}; b2 = 61,83 \text{ cm}$</p>  <p>Calculate the perimeter.</p>	<p>8.</p> <p>$a1 = 94 \text{ mm}; a2 = 42 \text{ mm}$ $b1 = 71,3 \text{ mm}; b2 = 56,55 \text{ mm}$</p>  <p>Calculate the perimeter.</p>