|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  10 | | Enlargement and Similarity Practice Test | | Non Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper. | | | |
| 1. | What is the scale factor when  is enlarged to ?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 2. | What is the scale factor when  is reduced to ?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 3. | is enlargedto  with a scale factor 3. The point *O* is the centre of the enlargement. Complete the enlargement. | | | |
| 4. | *ABCD* is a rectangle and *E* is a point on the diagonal *AC*. *AFEG* is a rectangle drawn through *A* and *E*. Name two triangles which are similar to triangle *ABC*.  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 5. | Complete the statement :  *When two figures are similar the corresponding sides of the two figures are........*  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 6. | In the figure shown .  Name a pair of similar triangles.  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 7. | In the diagram, *CB* || *DE*.  Explain why . | | | |
| 8. | In the diagram, *ST* || *RQ*.  Find the value of *x*. | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  9 | | Enlargement and Similarity Practice Test | | Calculator |
| Multiple Choice Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Mark all your answers on the accompanying multiple choice answer sheet, not on this Practice Test paper. You may do any working out on this Practice Test paper. Calculators are allowed for this section. | | | |
| 1. | The scale on a drawing of an ant is 200 : 1. If the length of the ant on the drawing is 48 cm, what is the actual length of the ant?  A. 1.2 mm B. 0.24mm C. 2.4 mm D. 24mm | | | |
| 2. | Which transformations could have been used to produce the diagram shown?  A. Triangle 1 is enlarged with factors  B. Triangle 2 is enlarged with factors  C. Triangle 3 is enlarged with factors  D. Triangle 2 is enlarged with factors | | | |
| 3. | Which triangles are similar in the diagram below?  A.  B.  C.  D. | | | |

|  |  |
| --- | --- |
| 4. | Which reason could be used to prove that  ?    A. *The three corresponding sides of the triangles are proportional.*  B. *The three corresponding angles of the triangles are proportional.*  C. *The three corresponding angles of the triangles are equal.*  D. *Two corresponding sides of the triangles are proportional and the included angle is common.* |
| 5. | Which statement is correct?  A.  B.  C.  D. |
| 6. | In the diagram, ,      What is the length of *PT*?  A. 14.4 m  B. 21.6 m  C. 15.0 m  D. 27 m |
| 7. | A photocopier is used to enlarge a diagram with a scale factor of 1.5. The area of the original diagram was 60 cm2. What is the area of the enlarged diagram?  A. 60 cm2.  B. 90 cm2.  C. 135 cm2.  D. 202.5 cm2. |
| 8. | A folk doll is made in similar sizes. A smaller doll is 15cm high and has a volume of 900 cm3. If a larger doll is 25 cm high, what is its volume?  A. 1 500 cm3.  B. 2 500 cm3.  C. 4 166 cm3.  D. 5 400 cm3. |

Enlargement and Similarity Practice Test

Multiple Choice Section

Answer Sheet

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Completely fill the response oval representing the most correct answer.

1. A B C D

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  9 | | Enlargement and Similarity Practice Test | | Calculator |
| Longer Questions | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper.  Calculators are allowed for this section. | | | |
|  | 1. (2 marks )   Enlarge the figure UVWX with scale factor  from the centre O. | | | |
| 1. | 1. (2 marks)   In the diagram .  Prove that  .  ..................................................................  .................................................................  ..................................................................  .................................................................  (b) (2 marks)    Calculate the length of *EF*.  ...................................................................................................................................  ................................................................................................................................... | | | |