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| Year  8 | Mathematics Practice Test –Pythagoras Theorem | **Calculator Practice Test** |
|  | Name |  |

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| 1. | Which triangle below has *AB* as it’s hypotenuse?  Triangle I only Triangle II only  Both Triangles. Neither Triangle. |
| 2. | Which is the correct statement of Pythagoras Theorem for the triangle shown? |
| 3. | Complete the statement of Pythagoras Theorem for the triangle shown.  2 2 2  + = |
| 4. | Find the length of the hypotenuse *PQ* in the triangle *PQR*.  *PQ =* cm. |
| 5. | Find the length of *AB* in the triangle below.  5.3 m  14 m  10 m  3.7 m |
| 6. | Calculate the value of *x*, correct to one decimal place.  *x =*  cm. |
| 7. | Find the distance EF to the nearest metre..  *EF* = m. |
| 8. | Find the length of *AB* in the triangle below.  28 m  56 m  31 366 m  81 m |
| 9. | Find the length of the side *PQ* in the triangle *PQR*, correct to 2 decimal places.  *PQ =* cm. |
| 10. | Find the distance *d*, to the nearest centimetre.  *d =* m. |
| 11. | Which triangle is right angled?  Triangle *STU* only. Triangle *VWX* only  Both Triangles. Neither Triangle. |
| 12. | Which of the following are Pythagorean triads?  i.e. They could be the sides of a right angled triangle?  (16, 28, 34) (15, 30, 34) (16, 30, 34) (16, 30, 35) |
| 13. | Calculate the value of *y*, correct to one decimal place.  *y =* cm. |
| 14. | Find the length of *MN* in the triangle below.  3,7 m  40.1 m  14.0 m  27.7 m |
| 15. | The ladder shown, leans against the top of the wall.  What is the height of the wall, correct to the nearest 10th of a metre?  Height is metres. |
| 16. | The plane climbs at a constant angle till it reaches a height of 2 800 m, while travelling 12.5 km relative to the ground. Calculate the distance that the plane has flown in a straight line, to the nearest 100 m.  Distance is km. |
| 17. | The measurements shown were taken to help calculate the width of the lake. Calculate the width of the lake, to the nearest 100 m.  Width is km. |
| 18. | A square park which is 200 m on each side has a path around the outside and a diagonal path through the centre. Kayleigh wants to walk from A to B. How much further would she walk if she goes around the outside, rather than through the diagonal?  283 metres.  117 metres.  200 metres.  150 metres. |
| 19. | Find the perimeter of the triangle *GHI.*  Perimeter is m. |
| 20. | Find the area of the triangle *LMN*  Area is m2. |