**Pythagoras Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Skills** | 1. Find (to 1 dp)   20cm  13cm |  |
| 1. A ship is 21 234m due east and 35 727m due north of a lighthouse. 2. Draw a diagram of this situation. 3. Find the direct distance from the ship to the lighthouse. Give your answer to the nearest km. |  |
| 1. Find the perimeter of the shape giving your answer to 1dp.   8.4mm  mmmm  15mm  7mm |  |
| 1. Work out the length of the line segment between 2. (2,5) and (7,17). 3. (-10,1) and (-7,-3). |  |
| **Stretch** | 1. Find the length of the longest diagonal through a cuboid of sides 4cm by 13cm by 16cm. |  |
| 1. The great pyramid of Egypt is a square based pyramid. The size of the square, *a* is 230m and the value of the height, *h* is 145m. Calculate: 2. *e* the edge length. 3. *s* the slant length.   *h*  *s*  *a*  *e* |  |
| **Literacy** | Pythagoras, hypotenuse, pyramid, slant, edge. |  |
| **Memory** | Learn to recognise 3, 4, 5 and 5, 12, 13. |  |
| **Research** | Can you find 5 more Pythagorean triples that are not multiples of the above? |  |