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

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| **Skills** | 1. Find $x$ (to 1 dp)

20cm13cm$x$  |  |
| 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.
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| 1. Find the perimeter of the shape giving your answer to 1dp.

8.4mmmmmm15mm7mm |  |
| 1. Work out the length of the line segment between
2. (2,5) and (7,17).
3. (-10,1) and (-7,-3).
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| **Stretch** | 1. Find the length of the longest diagonal through a cuboid of sides 4cm by 13cm by 16cm.
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| 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? |  |