

## Chapter 2: Pythagoras' theorem and surds

### Chapter pre-test

Name \_\_\_\_\_

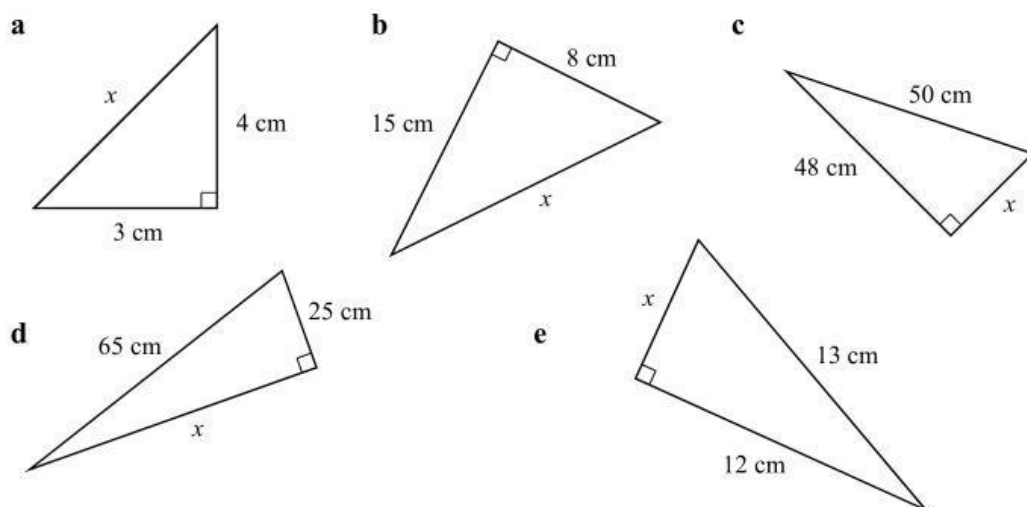
1 Calculate these squares without using your calculator.

a  $6^2$       b  $8^2$       c  $13^2$       d  $20^2$       e  $30^2$       f  $50^2$

2 Calculate the positive value of these square roots without using your calculator.

a  $\sqrt{4}$       b  $\sqrt{81}$       c  $\sqrt{16}$       d  $\sqrt{49}$       e  $\sqrt{196}$       f  $\sqrt{625}$

3 Use Pythagoras' theorem to find the length of the unknown side.



4 Round each of these numbers to three decimal places.

a 2.32419      b 14.0278212      c 37.9155

5 Find the length of the unknown sides in each of the following diagrams.

