

**Estimate solutions using real numbers**

- 1** What is a good approximation for the second square

$$7^2 = 49$$

$$7.1^2 \approx ?$$

A 43	B 50	C 55
D 60	E 57	F 41

- 2** What is a good approximation for the second square root?

$$\sqrt{49} = 7$$

$$\sqrt{53} \approx ?$$

A 7.3	B 8.1	C 6.5
D 4.9	E 8.9	F 4.1

- 3** Approximate the value of 'c' in this equation

$$25 + 4 = c^2$$

A c = 6.2	B c = 5.4
C c = 8.7	D c = 7.9
E c = 2	F c = 2.9

- 4** Approximate the value of 'a' in this equation

$$a^2 + 64 = 169$$

A a = 12.2	B a = 9.2
C a = 13.3	D a = 14.2
E a = 12.7	F a = 10.2

- 5** Approximate the value of 'b' in this equation

$$144 + b^2 = 324$$

A b = 8	B b = 6.7
C b = 9.4	D b = 14.8
E b = 30	F b = 13.4

- 6** Approximate the value of 'c' in this equation

$$a^2 + b^2 = c^2$$

$$a = 7$$

$$b = 12$$

$$c = ?$$

A c = 13.1	B c = 16.4
C c = 15.6	D c = 13.9
E c = 11.4	F c = 14.7

- 7** Approximate the value of 'b' in this equation

$$6^2 + b^2 = 12^2$$

A b = 18	B b = 10.4
C b = 9.4	D b = 13.5
E b = 11.7	F b = 8.4

- 8** Find the best approximation of the given square root

$$\sqrt{28}$$

A 3.8	B 4.5	C 5.3
D 6.7	E 3	F 6

**Estimate solutions using real numbers****9**

Approximate the value of 'c' in this equation

$$a^2 + b^2 = c^2$$

$$a = 7$$

$$b = 9$$

$$c = ?$$

A c = 11.4	B c = 16
C c = 7.2	D c = 5.7
E c = 10.6	F c = 8

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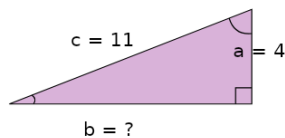
Approximate the value of 'c' in this equation

$$9^2 + 12^2 = c^2$$

A c = 12.5	B c = 17.5
C c = 14.2	D c = 15.8
E c = 15	F c = 13.3

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Find the length of the missing side as a decimal value based on the Pythagorean theorem: $a^2 + b^2 = c^2$



A b=10.25	B b=10.82	C b=15
D b=14.35	E b=44	F b=13.32

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Approximate the value of 'a' in this equation

$$a^2 + 100 = 169$$

A a = 8.3	B a = 9.1
C a = 5.8	D a = 23
E a = 11.3	F a = 5