Benchmark 2 Homework 1

Multiple Choice

Identify the choice that best completes the statement or answers the question.

Write each expression using exponents.

$$1$$
 $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

A
$$5^2$$

B
$$2^{-5}$$

$$C 2^4$$

$$\boxed{2} \quad a \cdot a \cdot a \cdot a$$

A
$$a^4$$

$$\mathbf{B}$$

$$C = 4^a$$

D
$$a^{-4}$$

$$A 6^b 6^c$$

B
$$b^{-6}g^{-6}$$

$$C b^5 g^5$$

$$D b^6 g^6$$

Write each number in scientific notation.

A
$$2.825 \times 10^5$$

B
$$2.825 \times 10^6$$

C
$$2.825 \times 10^{-3}$$

D
$$2.825 \times 10^3$$

0.2447

A
$$2.447 \times 10^{-6}$$

B
$$2.447 \times 10^{-1}$$

C
$$2.447 \times 10^{-7}$$

$$D \quad 2.447 \times 10^{2}$$

Estimate to the nearest whole number.

$$6 \sqrt{47}$$

$$7 \sqrt{322.7}$$

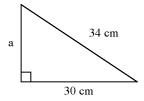
Name all sets of numbers to which each real number belongs.

 $8 \sqrt{1}$

- A Real and irrational
- B Real and rational.
- C Real, rational, and integer
- D Real, rational, integer, and whole

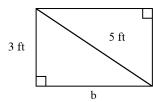
 $\frac{-49}{7}$

- A Real, rational, integer, and whole
- B Real, rational, and integer
- C Real and irrational
- D Real and rational
- Write an equation you could use to find the length of the missing side of each right triangle. Then find the missing length. Round to the nearest tenth if necessary.

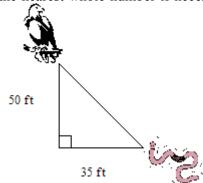


- A 16 cm
- B 45.34 cm
- C 256 cm
- D 4 cm

Write an equation you could use to find the length of the missing side of each right triangle. Then find the missing length. Round to the nearest tenth if necessary.



- A 2 ft
- B 16 ft
- C 4 ft
- D 5.83 ft
- How far is the bird from the worm? Round to the nearest whole number if necessary.



- A 61 ft
- B 60 ft
- C 55 ft
- D 50 ft