

Interpret a rate as a comparison of quantities

1

What is the (simplest) ratio of boys to girls?

boys : 3
girls : 4

A

9:8

B

5:12

C

3:4

D

2:2

2

A beetle takes 8 seconds to crawl a foot. How long, in seconds, does it take to crawl a yard?

 $8 \frac{s}{ft}$ is ? $\frac{s}{yrd}$

A

$$8 \frac{s}{ft} \cdot 3 \frac{ft}{yrd}$$

B

$$8 \frac{s}{ft} \cdot \frac{1 yrd}{3 ft}$$

C

$$8 \frac{s}{ft} \cdot \frac{1 min}{60 s}$$

3A beetle takes $\frac{3}{3}$ seconds to crawl a foot. How long, in seconds, does it take to crawl a yard? $\frac{3 s}{3 ft}$ is ? $\frac{s}{yrd}$

A

$$\frac{3 s}{3 ft} \cdot 60 \frac{s}{min}$$

B

$$\frac{3 s}{3 ft} \cdot 3 \frac{ft}{yrd}$$

C

$$\frac{3 s}{3 ft} \cdot \frac{1 min}{60 s}$$

D

$$\frac{3 s}{3 ft} \cdot \frac{1 yrd}{3 ft}$$

4

An ant takes 3 seconds to crawl a yard. How long, in seconds, does it take to crawl a foot?

 $3 \frac{s}{yrd}$ is ? $\frac{s}{ft}$

A

$$\frac{5 s}{3 ft}$$

B

$$\frac{3 s}{3 ft}$$

C

$$\frac{3 s}{7 ft}$$

D

$$16 \frac{s}{ft}$$

E

$$\frac{9 s}{3 ft}$$

F

$$\frac{1 s}{9 ft}$$

5

Train A travels at 7.5cm/ms for 4ms. Train B travels at 12.5cm/ms for 4ms. Which goes further?

A

Train B

B

Train A

6

A bug crawls at 40dm/hr and goes 2,800dm. How many hr does it take?

A

70 hr

B

1.75 hr

C

0.7 hr

D

112,000 hr

7

total hours: 10 hrs total earnings: 7.5 \$

A

1.75 \$/hr

B

0.5 \$/hr

C

1.5 \$/hr

D

0.75 \$/hr

8

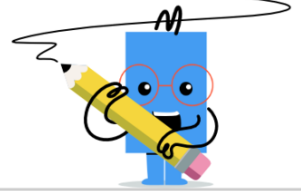
Bacteria A moves 2dm in 6d. Bacteria B moves 3dm in 96hr. Which is faster?

A

Bacteria B

B

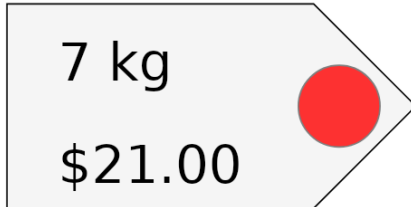
Bacteria A



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9

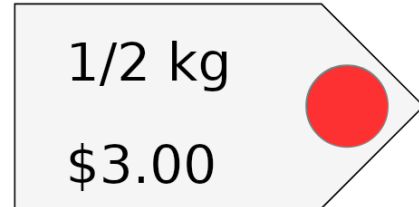
What is the price per kg of this item?



- A \$2.00/kg B \$3.00/kg C \$4.00/kg D \$1.00/kg

10

What is the price per kg of this item?



- A \$6.75/kg B \$6.00/kg C \$5.50/kg D \$4.75/kg

11

A caterpillar takes 6 minutes to move a yard. How long, in seconds, does it take to move a foot?

$$6 \frac{\text{min}}{\text{yrd}} \text{ is } ? \frac{\text{s}}{\text{ft}}$$

- A $\frac{3 \text{ s}}{360 \text{ ft}}$ B $\frac{366 \text{ s}}{3 \text{ ft}}$ C $\frac{360 \text{ s}}{3 \text{ ft}}$
D $\frac{18 \text{ s}}{60 \text{ ft}}$ E $\frac{60 \text{ s}}{18 \text{ ft}}$

12

A bird flies at 5 feet per second. What is its speed in yards per minute?

$$5 \frac{\text{ft}}{\text{s}} \text{ is } ? \frac{\text{yrd}}{\text{min}}$$

- A $\frac{19 \text{ yrd}}{60 \text{ min}}$ B $\frac{15 \text{ yrd}}{60 \text{ min}}$ C $\frac{3 \text{ yrd}}{300 \text{ min}}$
D $\frac{60 \text{ yrd}}{15 \text{ min}}$ E $\frac{300 \text{ yrd}}{3 \text{ min}}$ F $\frac{18 \text{ yrd}}{60 \text{ min}}$

13

Rocket A flies 40dm in 4ms. Rocket B flies 400cm in 7ms. Which is faster?

- A

 Rocket B
- B

 Rocket A

14

A bug crawls 1,800dm in 60hr. How fast is this in m/hr?

- A

 12 m/hr
- B

 4 m/hr
- C

 10,800 m/hr
- D

 3 m/hr

15

Bug A crawls 20hm in 50d. Bug B crawls 4km in 72,000min. Which is faster?

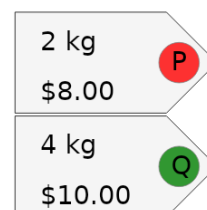
- A

 Bug B
- B

 Bug A

16

Which option has the lowest price per kg?



- A P B Q