



Math worksheet on 'Units - Conversion (2 Ratios) - Word Problem to Problem Setup (Level 2)'. Part of a broader unit on 'Unit Conversion - Intro'

Learn online: app.mobius.academy/math/units/unit_conversion_intro/

1

Select the correct way to set up this unit conversion problem

A bird flies at 2/5 feet per second. What is its speed in yards per minute?

- | | |
|---|---|
| a $\frac{ft}{5 s} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | b $\frac{ft}{5 s} \cdot \frac{1 yrd}{3 ft} \cdot \frac{1 min}{60 s}$ |
| c $\frac{ft}{5 s} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ | |

2

Select the correct way to set up this unit conversion problem

A caterpillar takes 3/7 minutes to move a yard. How long, in seconds, does it take to move a foot?

- | | |
|--|--|
| a $\frac{min}{7 yrd} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | b $\frac{min}{7 yrd} \cdot \frac{1 yrd}{60 s} \cdot \frac{1 min}{60 s}$ |
| c $\frac{min}{7 yrd} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ | |

3

Select the correct way to set up this unit conversion problem

A worm takes 5/8 minutes to move a foot. How long, in seconds, does it take to move a yard?

- | | |
|---|---|
| a $\frac{min}{8 ft} \cdot 60 \frac{s}{min} \cdot \frac{1 min}{60 s}$ | b $\frac{min}{8 ft} \cdot \frac{1 yrd}{3 ft} \cdot \frac{1 min}{60 s}$ |
| c $\frac{min}{8 ft} \cdot 3 \frac{ft}{yd} \cdot 60 \frac{s}{min}$ | |

4

Select the correct way to set up this unit conversion problem

A caterpillar takes 3/6 minutes to move a yard. How long, in seconds, does it take to move a foot?

- | | |
|--|--|
| a $\frac{min}{6 yrd} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ | b $\frac{min}{6 yrd} \cdot \frac{1 yrd}{3 ft} \cdot \frac{1 min}{60 s}$ |
| c $\frac{min}{6 yrd} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | |

5

Select the correct way to set up this unit conversion problem

A caterpillar takes 2/8 minutes to move a yard. How long, in seconds, does it take to move a foot?

- | | |
|--|--|
| a $\frac{min}{8 yrd} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | b $\frac{min}{8 yrd} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ |
| c $\frac{min}{8 yrd} \cdot \frac{1 min}{60 s} \cdot \frac{1 min}{60 s}$ | |

6

Select the correct way to set up this unit conversion problem

A caterpillar takes 2/2 minutes to move a yard. How long, in seconds, does it take to move a foot?

- | | |
|--|--|
| a $\frac{min}{2 yrd} \cdot \frac{1 yrd}{3 ft} \cdot \frac{1 min}{60 s}$ | b $\frac{min}{2 yrd} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ |
| c $\frac{min}{2 yrd} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | d $\frac{min}{2 yrd} \cdot \frac{1 min}{60 s} \cdot \frac{1 min}{60 s}$ |

7

Select the correct way to set up this unit conversion problem

A bird flies at 6/2 feet per second. What is its speed in yards per minute?

- | | |
|---|---|
| a $\frac{ft}{2 s} \cdot \frac{1 yrd}{3 ft} \cdot 60 \frac{s}{min}$ | b $\frac{ft}{2 s} \cdot 60 \frac{s}{min} \cdot \frac{1 min}{60 s}$ |
| c $\frac{ft}{2 s} \cdot 3 \frac{ft}{yd} \cdot \frac{1 min}{60 s}$ | |