

Fraction x Fraction

(Mixed Numbers, Decimal Fractions, Conversions)

Hint Sheet

NAME: _____

Date: _____

1. Sophia swims 1 and 2-thirds miles every day, 5 days per week. Which two equations can be used to find the total number of miles (t) she runs each week? Select **two** correct answers.

A. $(5 \times 1) \times \frac{2}{3} = t$

B. $(5 \times 1) + (5 \times \frac{2}{3}) = t$

C. $5 \times \frac{5}{3} = t$

D. $\frac{12}{3} \times 5 = t$

E. $5 \times 1 \times \frac{2}{3} = t$

F. $5 \times \frac{2}{3} = t$

days x miles
↑
mixed #

• How do you multiply whole # and mixed number?
• How do you convert a mixed # to improper?

2. A model house weighs about 4 pounds. Cameron wants to build another model house that weighs 1 and 2-thirds as much as the first model house. How much will the new model house weigh? Use the space below to write a target sentence & show your thinking.

$1\frac{2}{3}$ as much as 4 = $1\frac{2}{3}$ of 4

* Be careful with mixed x whole!

3. A top to a storage box has a length of 3-fourths foot and a width of 5-twelfths foot. What is the area, in square feet of the box top?

A. $\frac{15}{48}$

C. $\frac{20}{36}$

B. $\frac{8}{16}$

D. $\frac{15}{16}$

area is length x width... be careful about trick answers!

4. There are 5 pieces of wood in Elizabeth's garage. Each one is 6 and 1-seventh feet long. Select **all** of the expressions below that would give the total length of the wood in her garage.

A. $6\frac{1}{7} + 6\frac{1}{7} + 6\frac{1}{7} + 6\frac{1}{7} + 6\frac{1}{7}$

B. $5 \times \frac{42}{7}$

C. $5 \times 6\frac{1}{7}$

D. $5 \times \frac{43}{7}$

E. $\frac{42}{7} + \frac{42}{7} + \frac{42}{7} + \frac{42}{7} + \frac{42}{7}$

F. $\frac{43}{7} + \frac{43}{7} + \frac{43}{7} + \frac{43}{7} + \frac{43}{7}$

• There are 4 correct answers.

• multiplication = repeated addition

* Be careful when you convert mixed to improper.

5. Allie is building a backdrop for the school play that measures 11 and 1-half feet long by 20 feet wide. Select **all** options that represent the area of the backdrop in square feet.

A. $\frac{23}{2} \times \frac{1}{20}$

B. $\frac{22}{2} \times 20$

C. $\frac{23}{2} \times 20$

D. 230

E. 220

2 answers

6. Alexa makes a rectangular canvas for a portrait she plans to paint. The canvas is 3-fourths feet long and 1-fourth feet wide. What is the area, in square feet, of the canvas?

A. $\frac{3}{16}$

C. 1

B. $\frac{3}{8}$

D. 3

area = length x width

7. Mason is ordering food for a party. He ordered 6 gallons of ice cream. If 32 guests come to the party, what is the largest amount of ice cream each guest could receive.

A. $1\frac{1}{3}$ gallons

B. $\frac{1}{8}$ gallon

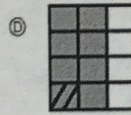
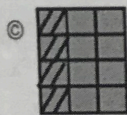
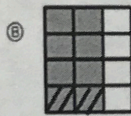
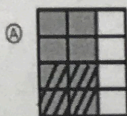
C. $1\frac{1}{6}$ gallons

D. $\frac{3}{16}$ gallon

ice cream is being divided equally among all guests.

Also... does your answer make sense?

8. Two-thirds of a landscape painting is the sky. The artist painted clouds on one-fourth of the sky. Which model represents how to find the part of the whole mural that will be the sky with clouds?



If you are not sure... try multiplying then looking for a model that matches the product. (Don't reduce!)

9. Solve the following & simplify if possible. Circle your answer.

$$\frac{5}{6} \times \frac{9}{10}$$

10. Solve the following in BOTH fraction form AND decimal form. Show your thinking.

six tenths times three tenths

tenths x tenths = ?

FRACTION	DECIMAL

Convert the following using fractions. Express your answer as a mixed number and simplify if possible.

11. $2\frac{1}{3}$ yards of rope = _____ feet

1 yd = 3 ft
 $2\frac{1}{3}$ yd = _____ ft
 $2\frac{1}{3} \times$ _____ ft

12. $5\frac{1}{2}$ gallons of punch = _____ quarts

1 gallon = 4 quarts
 $5\frac{1}{2}$ g = _____ q
 $5\frac{1}{2} \times$ _____ q

13. Steven has 8 and 3-fourths yards of rope. He needs to use $\frac{1}{3}$ of the rope for a project. How many yards of rope will he need to use? Use the space below to write a target sentence and show your thinking.

$\frac{1}{3}$ of the rope
 $8\frac{3}{4}$

Remember the 2 methods when you multiply by a mixed #