

Multiplying Fractions

Aug 24-7:53 AM

Quiz Review

5) $-2 + \frac{x}{3} = 4$
 $\frac{x}{3} = 6$
 $x = 18$

3) $8(\frac{K}{8}) = 218$
 $K = 218$

15) $1 - 2x = -7x - 9$
 $1 + 7x = -7x - 9$
 $14x = -10$
 $x = -\frac{5}{7}$

18) $4(a-1) + 8(b+a) = -4$
 $4a - 4 + 8b + 8a = -4$
 $12a + 8b = 0$
 $3a + 2b = 0$
 $3a = -2b$
 $a = -\frac{2}{3}b$

17) $7 + 8(6x+3) = 175$
 $7 + 48x + 24 = 175$
 $51 + 48x = 175$
 $48x = 124$
 $x = \frac{124}{48} = \frac{31}{12}$

Aug 28-8:53 AM

Handwritten notes showing fraction multiplication and simplification:

$\frac{42}{6} \cdot \frac{12}{2} = \frac{2 \cdot 3 \cdot 7}{2 \cdot 3} \cdot \frac{2 \cdot 2 \cdot 3}{2 \cdot 3} = \frac{7 \cdot 2 \cdot 3}{1} = 42$

$\frac{6}{2} \cdot \frac{2}{3} = \frac{2 \cdot 3}{1 \cdot 3} = 2$

$\frac{54}{9} \cdot \frac{36}{2} = \frac{2 \cdot 3 \cdot 3}{1 \cdot 3} \cdot \frac{2 \cdot 2 \cdot 3 \cdot 3}{1 \cdot 2} = \frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 3}{1} = 324$

$\frac{33}{3} \cdot \frac{23}{2} = \frac{3 \cdot 11}{1 \cdot 3} \cdot \frac{2 \cdot 11}{1 \cdot 2} = 11 \cdot 11 = 121$

$\frac{72}{2} \cdot \frac{10}{5} = \frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3}{1 \cdot 2} \cdot \frac{2 \cdot 5}{1 \cdot 5} = \frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 2}{1} = 72$

$\frac{42}{2} \cdot \frac{25}{5} = \frac{2 \cdot 3 \cdot 7}{1 \cdot 2} \cdot \frac{5 \cdot 5}{1 \cdot 5} = \frac{2 \cdot 3 \cdot 7 \cdot 5}{1} = 210$

$\frac{72}{3} \cdot \frac{10}{2} = \frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3}{1 \cdot 3} \cdot \frac{2 \cdot 5}{1 \cdot 2} = \frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 5}{1} = 180$

$\frac{33}{3} \cdot \frac{12}{2} = \frac{3 \cdot 11}{1 \cdot 3} \cdot \frac{2 \cdot 2 \cdot 3}{1 \cdot 2} = 11 \cdot 6 = 66$

$\frac{60}{2} \cdot \frac{10}{5} = \frac{2 \cdot 2 \cdot 3 \cdot 5}{1 \cdot 2} \cdot \frac{2 \cdot 5}{1 \cdot 5} = \frac{2 \cdot 3 \cdot 5 \cdot 2}{1} = 60$

$\frac{42}{2} \cdot \frac{25}{5} = \frac{2 \cdot 3 \cdot 7}{1 \cdot 2} \cdot \frac{5 \cdot 5}{1 \cdot 5} = \frac{2 \cdot 3 \cdot 7 \cdot 5}{1} = 210$

$\frac{72}{3} \cdot \frac{10}{2} = \frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3}{1 \cdot 3} \cdot \frac{2 \cdot 5}{1 \cdot 2} = \frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 5}{1} = 180$

$\frac{33}{3} \cdot \frac{12}{2} = \frac{3 \cdot 11}{1 \cdot 3} \cdot \frac{2 \cdot 2 \cdot 3}{1 \cdot 2} = 11 \cdot 6 = 66$

$\frac{60}{2} \cdot \frac{10}{5} = \frac{2 \cdot 2 \cdot 3 \cdot 5}{1 \cdot 2} \cdot \frac{2 \cdot 5}{1 \cdot 5} = \frac{2 \cdot 3 \cdot 5 \cdot 2}{1} = 60$

Aug 24-7:53 AM

Subtracting Fractions

Adding (or subtracting) fraction when the denominators are not equal = LCD!!!

Aug 24-7:53 AM

Handwritten notes showing fraction multiplication and simplification:

$-\frac{2}{3} \cdot \frac{1}{4} = -\frac{2 \cdot 1}{3 \cdot 4} = -\frac{2}{12} = -\frac{1}{6}$

$\frac{40}{10} \cdot \frac{9}{3} = \frac{2 \cdot 2 \cdot 2 \cdot 2}{1 \cdot 2 \cdot 5} \cdot \frac{3 \cdot 3}{1 \cdot 3} = \frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3}{1 \cdot 5} = \frac{72}{5}$

$\frac{21}{3} \cdot \frac{2}{2} = \frac{3 \cdot 7}{1 \cdot 3} \cdot \frac{2 \cdot 2}{1 \cdot 2} = 7 \cdot 2 = 14$

$\frac{37}{3} \cdot \frac{2}{2} = \frac{37 \cdot 2}{3 \cdot 2} = \frac{74}{3}$

Aug 24-7:54 AM

August 28, 2018

simplify

1) $8 \cdot (1/3) = \frac{8}{1} \cdot \frac{1}{3} = \frac{8}{3}$

2) $(1/6) / (1/3) = \frac{1}{6} \cdot \frac{3}{1} = \frac{1 \cdot 3}{6 \cdot 1} = \frac{3}{6} = \frac{1}{2}$

3) $1/3 + 2/3 = \frac{1}{3} + \frac{2}{3} = \frac{1+2}{3} = \frac{3}{3} = 1$

4) $1/6 - 2/3 = \frac{1}{6} - \frac{2}{3} = \frac{1}{6} - \frac{4}{6} = -\frac{3}{6} = -\frac{1}{2}$

Aug 27-10:03 AM



Aug 29-9:20 AM

Mario was making cookies. He mixed $2\frac{1}{2}$ cups of flour, $1\frac{1}{4}$ cups of sugar and $\frac{1}{2}$ cup of brown sugar together in a bowl. How many cups did he have altogether?

Becky has 5 candy bars. She wants to share them with 3 friends. How much will each friend get?

Multi-Step Problems

Kim had 4 chocolate chip cookies and 3 sugar cookies. Kim's sister ate two of her chocolate chip cookies. How many cookies are left?

$4+3-2=5$

Becky gets \$5.00 a week for chores, and helps with chores for 4 weeks. If Becky wants to spend only half of her money, how much will she have left to save?

$4+3-2 = \text{Becky has } 1 \text{ dollar and } 25 \text{ c}$

Becky has 4 quarters. Becky's mom gives her 3 more. Becky spends 2 of them on candy. How many quarters does Becky have left?

$4+3-2 = \text{Becky has } 5 \text{ quarters}$
 Has five quarters
 1 dollar and 25 c

Travis has 13 pieces of gum that he wants to share with his 2 friends. If Travis and his friends split the gum equally, how many pieces will they each get?

friend friend T
 IIII, IIII, IIII

They each get 4 pieces and there is 1 left.
 $\frac{13}{2} = 4.33 = 4\frac{1}{2}$

Aug 24-7:51 AM

Mario was making cookies. He mixed $2\frac{1}{2}$ cups of flour, $1\frac{1}{4}$ cups of sugar and $\frac{1}{2}$ cup of brown sugar together in a bowl. How many cups did he have altogether?

John 64

Becky has 5 candy bars. She wants to share them with 3 friends. How much will each friend get?

Multi-Step Problems

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Joe 15

Becky has 4 quarters. Becky's mom gives her 3 more. Becky spends 2 of them on candy. How many quarters does Becky have left?

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Aug 24-7:51 AM

Fraction Word Problems

| | |
|---|---|
| #1 John bought $\frac{8}{9}$ of a pound of chocolate and ate $\frac{1}{3}$ of a pound. How much was left? | #2 Tom bought a board that was $\frac{7}{8}$ of a yard long. He cut off $\frac{1}{2}$ of a yard. How much was left? |
| #3 Sally walked $\frac{2}{5}$ of a mile before lunch and $\frac{1}{4}$ another $\frac{3}{4}$ of a mile. How far did she walk in all? | #4 Sally walked $\frac{3}{4}$ of a mile before lunch and $\frac{1}{2}$ of a mile after lunch. How far did she walk in all? |
| #5 Don bought $\frac{3}{4}$ of a pound of jelly beans and $\frac{2}{3}$ of a pound of gumdrops. How much candy did he buy? | #6 The track is $\frac{3}{5}$ of a mile long. If a runner jogged around it twice, how far did he run? |
| #7 Which apple weighs more, one that weighs $\frac{2}{3}$ of a pound or one that weighs $\frac{5}{6}$ of a pound? | #8 Stanley ordered two pizzas cut into eighths. If he ate $\frac{5}{8}$ of a pizza, how much was left? |
| #9 Sandra bought $2\frac{1}{2}$ yards of red fabric and $1\frac{1}{4}$ of blue fabric. How much fabric did she buy? | #10 An equilateral triangle measures $3\frac{1}{2}$ inches on one side. What is the perimeter of the triangle? |

Handwritten notes and calculations include: $\frac{8}{9} - \frac{1}{3} = \frac{5}{9}$, $\frac{7}{8} - \frac{1}{2} = \frac{3}{8}$, $\frac{2}{5} + \frac{3}{4} = \frac{17}{20}$, $\frac{3}{4} + \frac{2}{3} = \frac{17}{12}$, $\frac{3}{5} \times 2 = \frac{6}{5}$, $\frac{2}{3} > \frac{5}{6}$, $2 \times 3\frac{1}{2} = 7$, and $2\frac{3}{4} + 1\frac{1}{4} = 4$ fabric.

Aug 24-9:13 AM

August 29, 2018

Write a fraction you can

- add
- subtract
- multiply
- divide

That is four different problems...

Aug 27-7:43 AM

August 31, 2018

16) $-4\sqrt{75n}$ $-4\sqrt{25 \cdot 3 \cdot n} = -4 \cdot 5 \sqrt{3n} = -20\sqrt{3n}$

18) $4\sqrt{32x}$ $4\sqrt{16 \cdot 2x} = 4 \cdot 4\sqrt{2x} = 16\sqrt{2x}$

20) $4\sqrt{80a^2}$ $4\sqrt{16 \cdot 5 \cdot a^2} = 4 \cdot 4 \cdot a\sqrt{5} = 16a\sqrt{5}$

22) $\sqrt{45mn^2}$ $\sqrt{9 \cdot 5 \cdot m \cdot n^2} = 3\sqrt{5mn^2}$













24) $\sqrt{18xy}$ $\sqrt{9 \cdot 2xy} = 3\sqrt{2xy}$

Aug 24-9:15 AM

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













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 Area, Volume & Surface Area Date _____ Period _____

Name each figure.

1)  Sphere
 2)  Cone
 3)  Rectangular Prism
 4)  Triangular Prism
 5)  Sphere
 6)  Cylinder
 7)  Rectangular Prism
 8)  Cone
 9)  Triangular Pyramid
 10)  Square Pyramid
 11)  Trapezoid
 12)  Triangle













Find the area each.

Aug 24-9:15 AM

13)  14) 
 15)  16) 
 17)  18) 
 19)  20) 
 21)  22) 
 23)  24) 
 25)  26) 

Find the volume of each figure. Round to the nearest tenth.

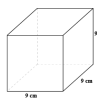



Aug 24-9:17 AM

27)  28) 
 29)  30) 
 31)  32) 
 Find the surface area of each figure. Round to the nearest tenth.
 33)  34) 
 35)  36) 
 37)  38) 

Aug 24-9:17 AM

Geometry 2 – Unit Seven: Surface Area & Volume, Practice

In Problems #1 – #4, find the surface area and volume of each prism.

1. CUBE  2. RECTANGULAR PRISM 
 3. TRIANGULAR PRISM  4. TRIANGULAR PRISM 

5. A rectangular prism has a surface area of 448 cm^2 . Its length is 14 cm and its width is 6 cm. Find its height.
 6. A cylinder has a radius of 12 cm and a height of 15 cm. Find its surface area and volume. Express your answer in terms of π , or round your answer to two decimal places.
 7. A cylinder has a diameter of 10 in and a height of 5 in. Find its surface area and volume. Express your answer in terms of π , or round your answer to two decimal places.
 8. A cylinder has a radius of 7.5 mm and a height of 12.5 mm. Find its surface area and volume. Express your answer in terms of π , or round your answer to two decimal places.

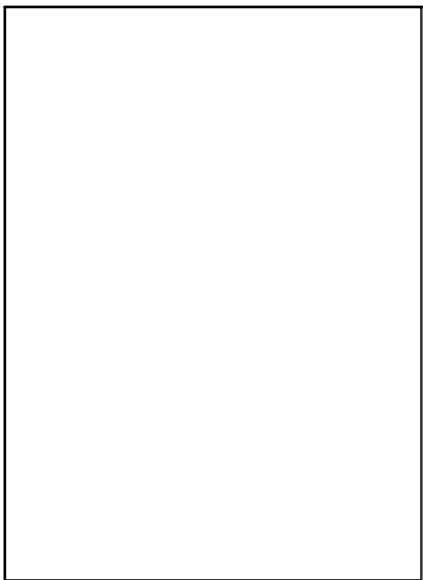
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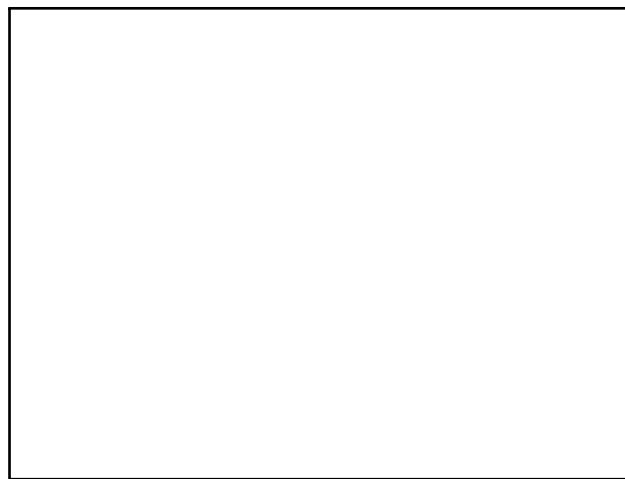
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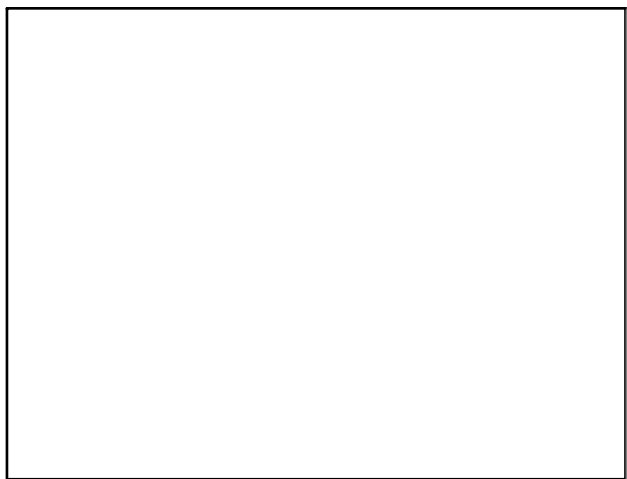
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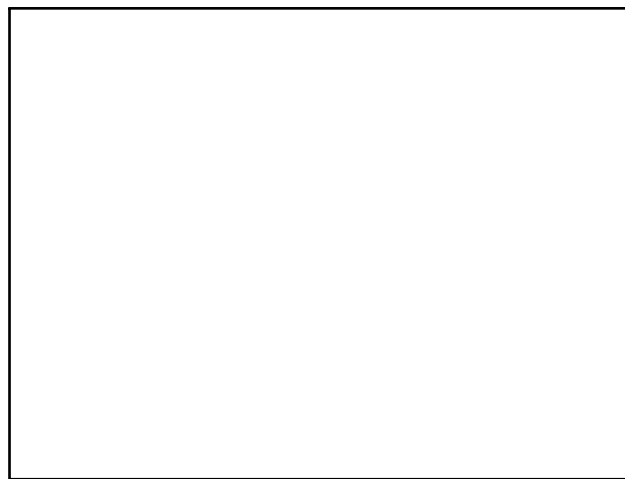
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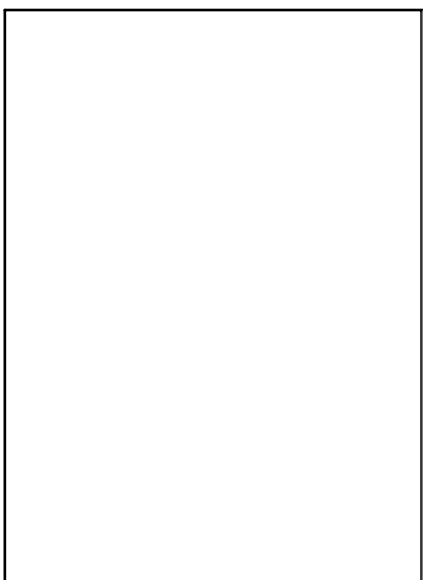
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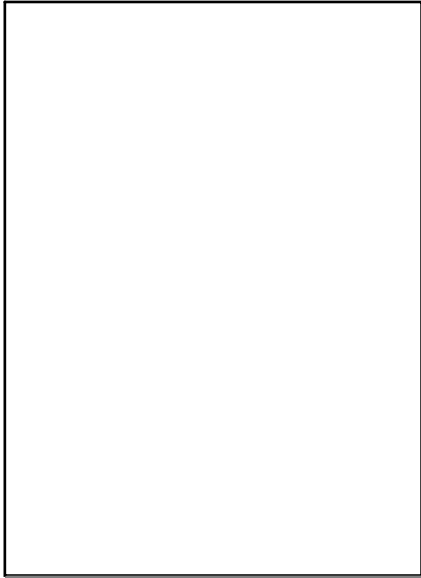
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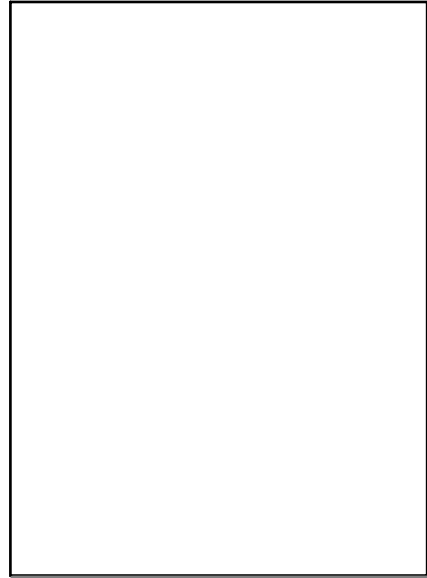
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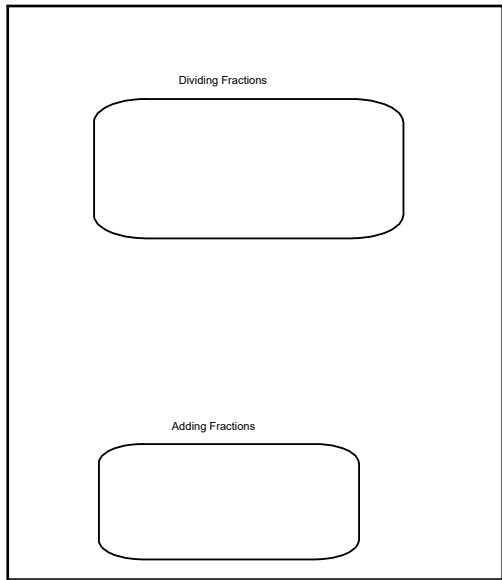
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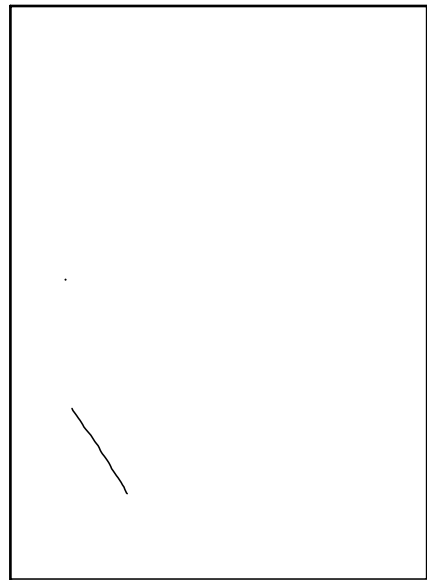
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Aug 24-9:26 AM



Aug 24-7:53 AM



Aug 24-9:27 AM