Powers of Ten and Scientific Notation - Independent Practice Worksheet
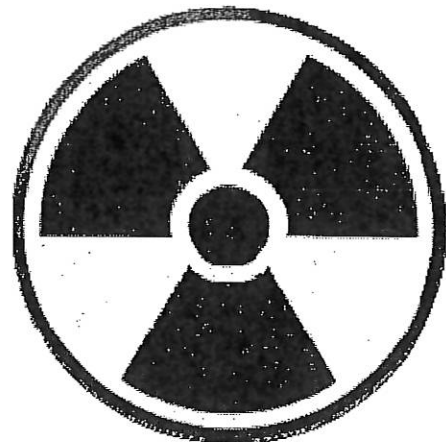
Solve all the problems.

1. Write 0.00000248 in scientific notation.

2. Which is the larger value: 4×10^2 or 7×10^4?

3. Express 5.26×10^6 in standard form.

4. Which is the larger value: 5×10^5 or 3×10^7?

5. Express 1.24×10^5 in standard form.

6. Write 0.00684 in scientific notation.

7. Write 0.000000478 in scientific notation.

8. Express 2.69×10^9 in standard form.

9. Which is the larger value: 6×10^3 or 6×10^8?

10. Which is the larger value: 7×10^2 or 2×10^7?

Combining Math and Art!
Create A Design

Using 8 or more different colors, shade in ALL of the boxes in the grid to create a design.

Make sure to use different amounts of at least 5 of your colors. For example, don't shade 10 blue, 10 green, 10 red, 10 purple, 10 yellow, 10 pink, 10 black...etc. Have some variety. For example: 10 pink, 6 red, 8 green, 12 blue etc.

Record each color below, with the fraction, decimal and percent of the whole.

For example: If you shaded in five blocks pink:

Pink: 5/100, 0.05, 5%

MATH TANGO ACTIVITY

MULTIPLY FRACTIONS

SIMPLIFY

CONVERT TO DECIMAL THEN PERCENT

Tangram puzzle contents:

- $\frac{11}{25} * \frac{5}{11}$
- $\frac{3}{4} * \frac{4}{9}$
- $\frac{2}{3} * \frac{3}{5}$
- $\frac{3}{4} * \frac{3}{8}$
- $\frac{1}{2} * \frac{5}{4}$
- $\frac{11}{25} * \frac{5}{11}$
- $\frac{8}{9} * \frac{9}{16}$
- $\frac{9}{16} * \frac{2}{3}$
- $\frac{1}{5} * \frac{5}{8}$
- $\frac{3}{8} * \frac{2}{3}$

Percentages: 25%, 40%, 12.5%, 33.3%, 66.6%, 37.5%, 10%, 50%, 20%
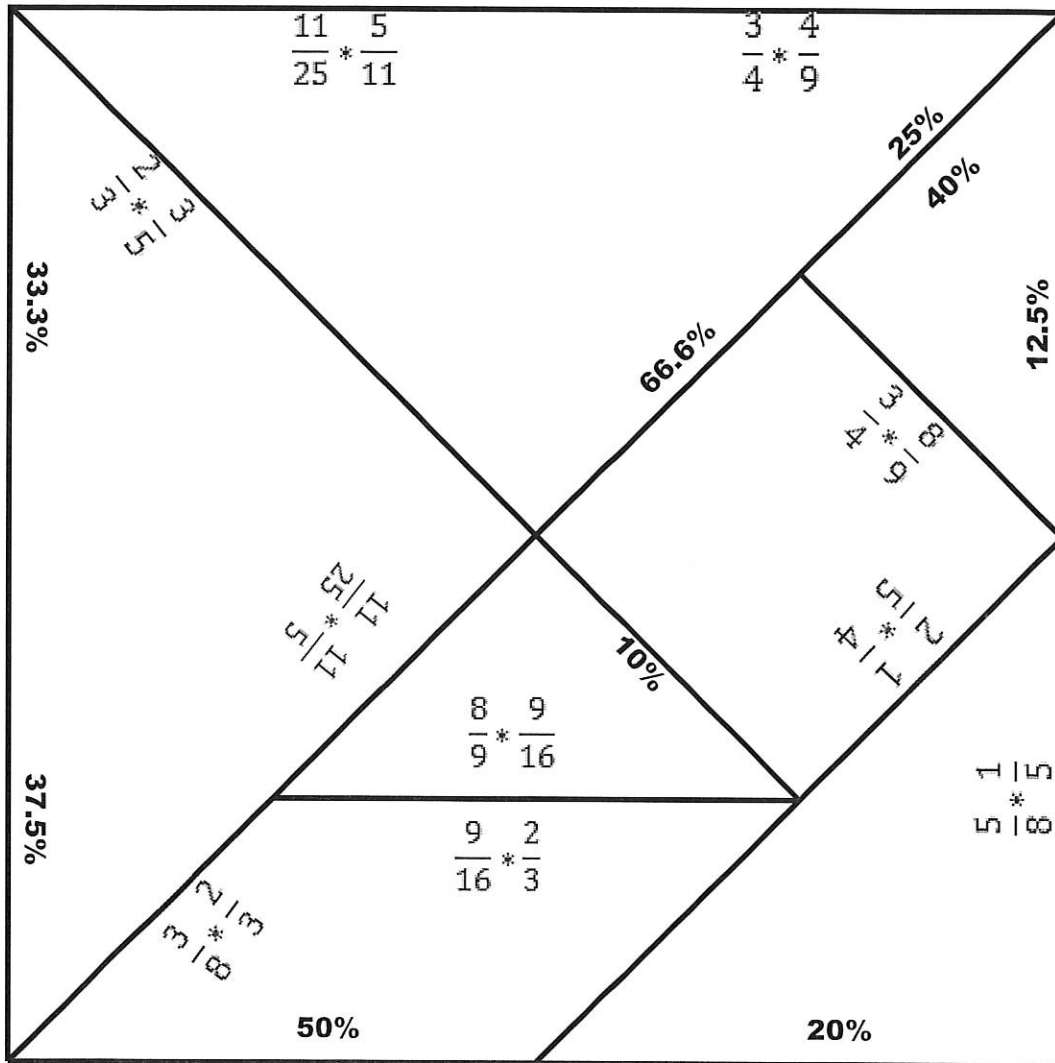
DIRECTIONS

1) Multiply the fractions then simplify to lowest terms

2) Convert the fractions to their equivalent decimals

3) Convert the decimals to percentages

4) Cut the individual tangram pieces apart

5) Match each fraction multiplication expression to its percent

6) Mount your Math Tango on construction paper

HEART

12.5% $\frac{5}{8} * \frac{1}{5}$

40% $\frac{2}{3} * \frac{3}{5}$

$\frac{11}{25} * \frac{11}{5}$

20% $\frac{11}{25} * \frac{5}{11}$

33% $\frac{3}{4} * \frac{4}{9}$

37.5% $\frac{9}{16} * \frac{2}{3}$

25% $\frac{3}{8} * \frac{2}{3}$

50% $\frac{9}{6} * \frac{9}{16}$

66.6% $\frac{4}{3} * \frac{9}{8}$

10% $\frac{1}{4} * \frac{2}{5}$

7-9

Exercises

Learn It Online
Homework Help Online **go.hrw.com,**
keyword MR10 7-9 **Go**
Exercises 1–18, 21, 23, 25, 27,
29, 31, 33
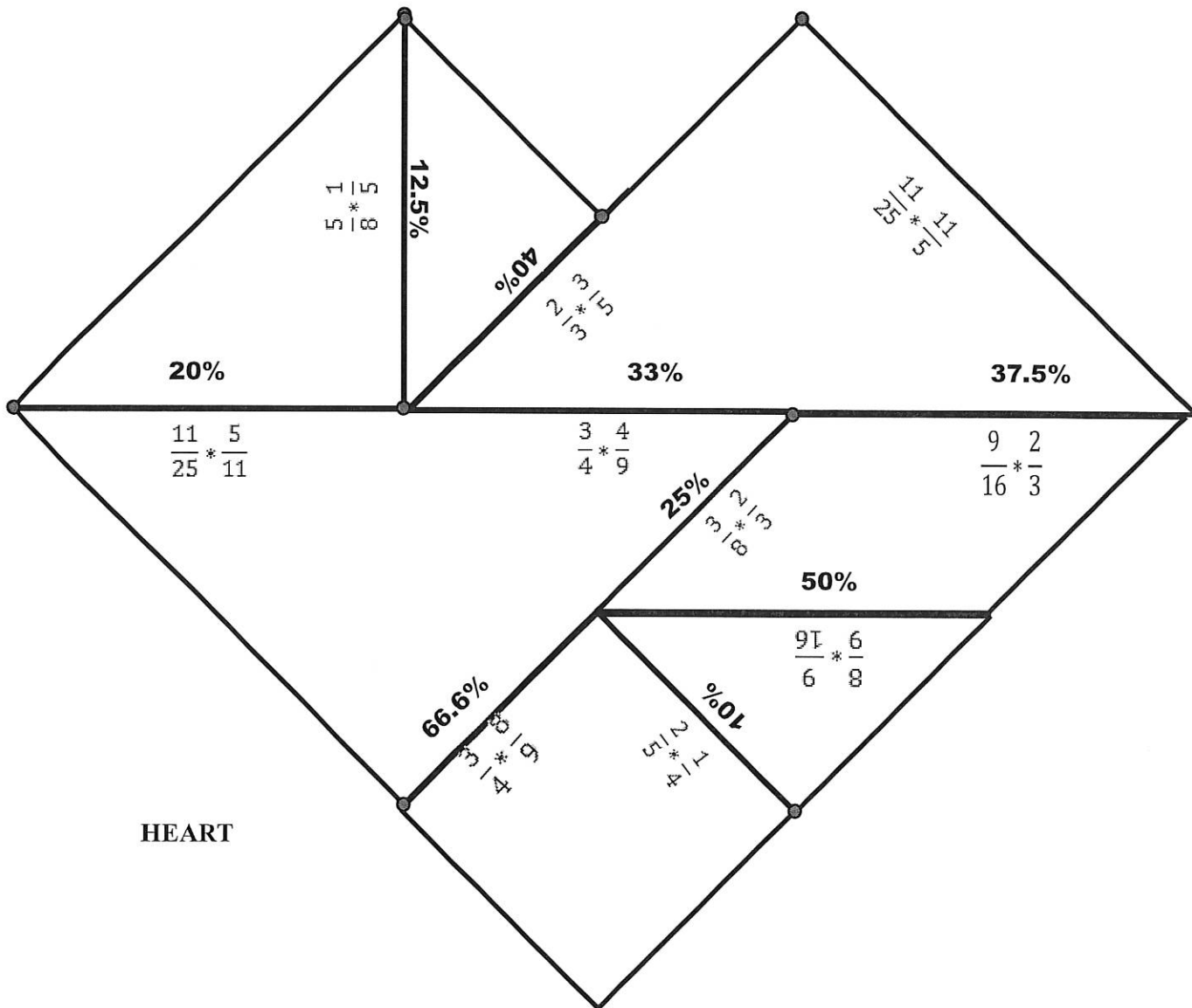
GUIDED PRACTICE

See Example **1** 1. Members of the drama club sold T-shirts for their upcoming musical. Of the 80 T-shirts sold, 55% were size medium. How many of the T-shirts sold were size medium?

See Example **2** 2. Loni has read 25% of a book. If she has been reading for 5 hours, how many more hours will it take her to complete the book?

See Example **3** 3. Find 12% of 56. 4. Find 65% of 240. 5. Find 2% of 20.

6. Find 85% of 115. 7. Find 70% of 54. 8. Find 85% of 355.

INDEPENDENT PRACTICE

See Example **1** 9. Tamara collects porcelain dolls. Of the 24 dolls that she has, 25% have blond hair. How many of her dolls have blond hair?

10. Mr. Green has a garden. Of the 40 seeds he planted, 35% were vegetable seed How many vegetable seeds did he plant?

See Example **2** 11. Kevin has mowed 40% of the lawn. If he has been mowing for 20 minutes, how long will it take him to mow the rest of the lawn?

12. Maggie ordered a painting. She paid 30% of the total cost when she ordered it, and she will pay the remaining amount when it is delivered. If she has paid $15, how much more does she owe?

See Example **3** 13. Find 22% of 130. 14. Find 78% of 350. 15. Find 28% of 65.

16. Find 9% of 50. 17. Find 45% of 210. 18. Find 54% of 602.

PRACTICE AND PROBLEM SOLVING

Extra Practice
See page EP15.

Find the percent of each number.

19. 6% of 38 20. 20% of 182 21. 13% of 40

22. 32% of 205 23. 14% of 88 24. 98% of 105

25. 78% of 52 26. 31% of 345 27. 62% of 50

28. 10% of 50 29. 1.5% of 800 30. 0.3% of 9

31. **Geometry** The width of a rectangular room is 75% of the length of the room. The room is 12 feet long.

   a. How wide is the room?

   b. The area of a rectangle is the product of the length and the width. What is the area of the room?

32. **Multi-Step** Marissa is shopping and finds a sales rack with items that are 25% off. If Marissa likes a shirt on the rack that originally cost $15, how much will she pay for the shirt before tax?

Complete each sales receipt by calculating total prices for each item of the receipt, the subtotal amount, the sales tax amount, and the total purchase amount.

Sales Tax Rate: _____
Sales Tax Rate Converted to Decimal: ___

Receipt #1
Customer Name: Monica

Item Name	Retail Price	x	Quantity	=	Total Price
Retro Pencils	$.20		5		$
Piranha Sharpener	$.50		1		$
6-Color Pen	$.75		2		$
Dessert Eraser	$.15		2		$
			Subtotal		$
			Sales Tax Amount		$
			Total		$

Receipt #2
Customer Name: Jack

Item Name	Retail Price	x	Quantity	=	Total Price
Pet Silhouettes Pencil	$.20		4		$
Mouse Sharpener	$.50		3		$
Cushion Click Mechanical Pencil	$.35		1		$
Bracelet Pen	$.40		2		$
			Subtotal		$
			Sales Tax Amount		$
			Total		$

Calculating Sales Tax
Sales Receipt Worksheet

Complete each sales receipt by calculating total prices for each item of the receipt, the subtotal amount, the sales tax amount, and the total purchase amount.

Sales Tax Rate: _____
Sales Tax Rate Converted to Decimal: ___

Receipt #3
Customer Name: Peter

Item Name	Retail Price	x	Quantity	=	Total Price
Twister Pen	$.35		2		$
Mini Fish Eraser	$.50		1		$
Happy Cap Eraser	$.05		5		$
Erasing Grip	$.35		3		$
			Subtotal		$
			Sales Tax Amount		$
			Total		$

Receipt #4
Customer Name: Julia

Item Name	Retail Price	x	Quantity	=	Total Price
Twister Eraser	$.35		3		$
Astral Wonders Pencils	$.20		4		$
Criss Cross Critters	$.15		2		$
Traction Mechanical Pencil	$.35		2		$
Munchin Mike Sharpener	$.50		2		$
			Subtotal		$
			Sales Tax Amount		$
			Total		$