

NAME _____

DATE _____

PERIOD _____

Unit 3, Lesson 16: Finding the Percentage

1. A sign in front of a roller coaster says "You must be 40 inches tall to ride." What percentage of this height is:

a. 34 inches? $\frac{34}{40} = \cancel{85} 85\%$

b. 54 inches? $\frac{54}{40} = 135\%$

| in | % |
|----|-----|
| 40 | 100 |
| 20 | 50 |
| 2 | 5 |
| 34 | 85 |
| 54 | 135 |

$27 \times 5 = 135$

1/2

2. At a hardware store, a tool set normally costs \$80. During a sale this week, the tool set costs \$12 less than usual. What percentage of the usual price is the savings? Explain or show your reasoning.

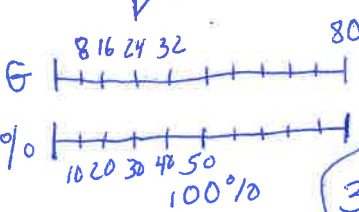
$\frac{\$12}{\$80} = .15 = 15\%$

| \$ part | % or whole |
|---------|------------|
| 12 | 80 |
| 1.5 | 10 |
| 15 | 100 |

$\times 10$ (15%)

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3. A bathtub can hold 80 gallons of water. The faucet flows at a rate of 4 gallons per minute. What percentage of the tub will be filled after 6 minutes?



4 gallons \times 6 = 24 gallons
 OR $\frac{24}{80} = \frac{3}{10} = \frac{30}{100} = 30\%$

| part | whole |
|------|-------|
| 24 | 80 |
| 3 | 10 |
| 30 | 100 |

$\times 10$

1/1

4. The sale price of every item in a store is 85% of its usual price.

a. The usual price of a backpack is \$30, what is its sale price?

| part | whole |
|-------|-------|
| 85 | 100 |
| 8.5 | 10 |
| 25.50 | 30 |

$\times 3$

OR $\frac{30 \cdot 85}{100} = \frac{2550}{100} = 25.50$

OR $30 \times .85 = 25.50$

need 17 divide by 20

| part | whole |
|------|-------|
| 17 | 20 |
| 1.7 | 2 |
| 17 | 20 |

$\times 1.5$

b. The usual price of a sweatshirt is \$18, what is its sale price?

| part | whole |
|-------|-------|
| 85 | 100 |
| 1.70 | 2 |
| 15.30 | 18 |

$\times 9$

OR $\$18.00 \times \frac{85}{100} = \frac{1530}{100} = \15.30

OR $18 \times .85 = 15.30$

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