

## Percentage of an Amount – Multi-Step



1) Use the bar model to help you find these percentages of 400.

| 400 |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% |

a) 10% =

b) 30% =

c) 50% =

d) 80% =

e) 90% =

2) Find 1% of each of these numbers. Then, use your answers to find the other percentages and complete the table.

|      | 1%                   | 6%                   | 9%                   |
|------|----------------------|----------------------|----------------------|
| 200  | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 7000 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 80   | <input type="text"/> | <input type="text"/> | <input type="text"/> |

3) Using the example below, find two different ways to make each of these percentages.

$$21\% = 10\% + 10\% + 1\%$$

$$21\% = 20\% + 1\%$$

a) 55% =

b) 99% =

4) Use your answers from question 3) to help you find the percentages of these amounts.

a) 55% of 8000 =

b) 99% of 4000 =

55% of 400 =

99% of 150 =

55% of 80 =

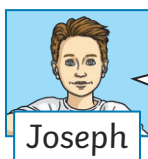
99% of 90 =



## Percentage of an Amount – Multi-Step



1) Is each child's statement true or false? Prove it using an example.



To find 30% of a number, I can divide the number by 10 and then multiply by 3.

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To find 30% of a number, I can divide the number by 30.



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To find 30% of a number, I can divide the number by 100 and then multiply by 30.

2) Drew wants to find an efficient way of calculating 49% of 800.



First, I will find 50% and 1%. Then, I will subtract 1% from 50%.

Drew's calculations:

$$50\% \text{ of } 800 = 400$$

$$1\% \text{ of } 800 = 80$$

$$400 + 80 = 480$$

$$49\% \text{ of } 800 = 480$$

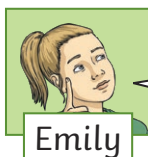
Look carefully at Drew's calculations and correct any mistakes they have made.

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3) Emily and Hari are comparing who saved the most money in a sale.



I think that I saved the most money by getting 65% off the price of the coat.

I disagree. By getting 75% off the price of the jumper, I saved the most money.



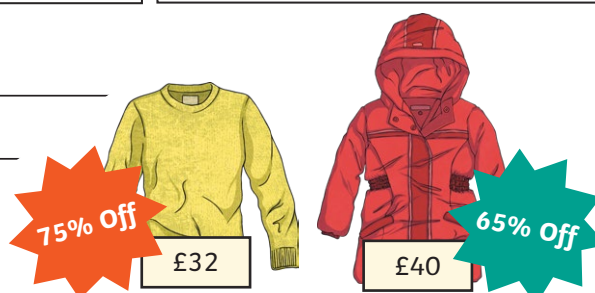
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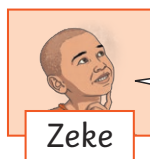
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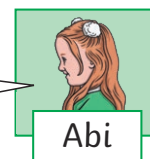
## Percentage of an Amount – Multi-Step



1) Zeke and Abi are thinking of the most efficient way of finding 45% of 400.



I am going to find 50% and then subtract 5%.



I am going to find  $4 \times 10\%$  and then add 5%.

Find two different combinations of percentages that you could use to find these percentages of amounts. Then, use one of those methods to calculate the answer.

a) 77% of 80



b) 89% of 300



c) 37% of 6500



2) Using the example below, complete the number statement using the cards. Can you find three different ways?

|                      |    |                      |   |                      |    |                      |
|----------------------|----|----------------------|---|----------------------|----|----------------------|
| 40%                  | of | 180                  | = | 15%                  | of | 480                  |
| <input type="text"/> | of | <input type="text"/> | = | <input type="text"/> | of | <input type="text"/> |
| <input type="text"/> | of | <input type="text"/> | = | <input type="text"/> | of | <input type="text"/> |
| <input type="text"/> | of | <input type="text"/> | = | <input type="text"/> | of | <input type="text"/> |
| <input type="text"/> | of | <input type="text"/> | = | <input type="text"/> | of | <input type="text"/> |

|     |     |     |     |
|-----|-----|-----|-----|
| 30% | 40% | 105 | 240 |
| 10% | 180 | 35% | 20% |
| 360 | 70% | 300 | 15% |
|     | 120 | 480 |     |

3) Use the clues to identify what each number could be.

a) I am a 4-digit even number. My hundreds and tens digits are the same. My thousands digit is half of my ones digit. 50% of me is between 2250 and 2300.

b) I am an odd 2-digit number. 10% of me is between 6 and 7. My tens digit is double my ones digit.

