Ratios: N5
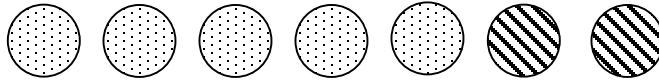
Basic Skill:

1.   What is the ratio of :
      a) Dotted to striped
      b) All circles to striped

2.

Trail Mix Recipe

1 scoop raisins
3 scoops nuts
2 scoops dried papaya
1 scoop sunflower seeds

Write as many ratios as you can for the trail mix recipe. Explain what each ratio compares.

Mid-Range

1. Which statement is true if the ratio of boys to girls is 8:3?

   a) There are 5 times as many boys as girls.

   b) $\frac{3}{8}$ of the children are girls

   c) There are three times as many boys as girls.

   d) $\frac{3}{11}$ of the children are girls

2.   Draw a picture to show a part-to-part ratio of 3:7.
      Draw a picture to show a part-to-whole ratio of 3:7.

3. The zoo has 3 lions, 4 tigers, and 6 monkeys. Express this information as ratios:

   a.) in word form
   b.) ❏: ❏
   c.) ❏ to ❏
   d.) as a fraction

4. The ratio of children to the total number of people at the movie theatre is 32:57. How many adults are at the theatre?

5. Mark describes the ratio below 3:4 and Mary says he is incorrect, that it is actually 4:7. They come to you and ask for your advice. What would you tell them? Explain your reasoning.

High Level

1. Zachary's punch recipe calls for 3 L of ginger ale, 1 L of cranberry juice and 2 L of orange juice. Suppose Zachary uses 9 L of ginger ale, how much cranberry juice and orange juice should he use? Justify your answer.

2. In a class of 30 students, there are 20 girls. Explain why the ratio of boys to girls is 1:2.

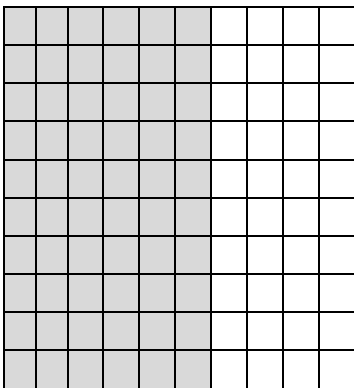## Percents, Fractions and Decimals: N6

Basic Skill:

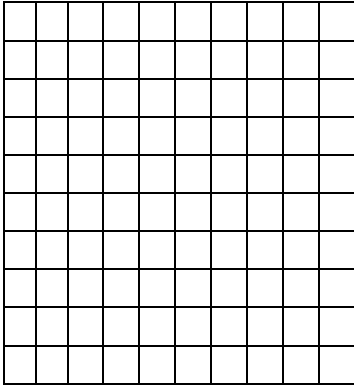1. What percent is represented by the shaded section in the hundredths grid below?

____ %

2. Shade the grid to show 43%:

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3. How many centimeters is 15% of a meter stick?

4. Express the following percent as a fraction, a decimal, and as a ratio: **75%**

      Fraction:

      Decimal:

      Ratio:

Mid-Range

1. Which does not equal 75%?

      a) 75:100

      b) 0.75

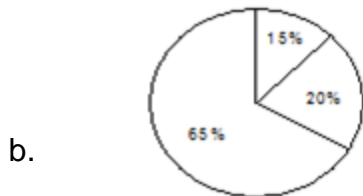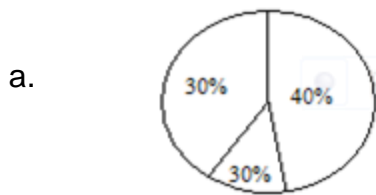   c) $\dfrac{7}{5}$

      d) $\dfrac{3}{4}$

2. Which is the least? The most? Explain your answer:

$$\dfrac{1}{35}; \ 35\%; \ 0{,}35$$

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3. State whether the following diagrams are correct or incorrect. Explain your thinking.

a.

b.

High:

1. Which one doesn't belong? Explain your choice:

$$\frac{1}{3}; \ 0,3; \ 30\%; \ 33\%$$

2. On your last Math test you got 70%. How many questions could have been on the test and how many did you get correct? Give two possible solutions.

3. Describe different ratio and percent equivalents for the broken eggs in the carton below.

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