Activity 1

1. A bonsai tree is 18 in. wide and stands 2 ft. tall. What is the ratio of the width of the bonsai to its height?

Activity 2

1. The measurement of two supplementary angles are in the ratio $1:4$. What are the measures of the angles? (*Hint: Supplementary angles are two angles that add up to 180°).*

Activity 3

1. The lengths of the sides of a triangle are in the extended ratio $4:7:9$. The perimeter is 60 cm. What are the lengths of the sides?

Activity 4

What is the solution of each proportion?

1. $\dfrac{9}{2} = \dfrac{a}{14}$
2. $\dfrac{15}{m+1} = \dfrac{3}{m}$

Activity 5

Use the proportion $\dfrac{x}{6} = \dfrac{y}{7}$ for questions 1 and 2. What ratio completes the equivalent proportion? Justify your answer.

1. $\dfrac{6}{x} = \dfrac{\blacksquare}{\blacksquare}$

2. $\dfrac{\blacksquare}{\blacksquare} = \dfrac{y+7}{7}$

3. Explain why $\dfrac{6}{x-6} = \dfrac{7}{y-7}$ is an equivalent proportion to $\dfrac{x}{6} = \dfrac{y}{7}$.