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1. Pierre drew two regular hexagons (6-sided figures with all sides equal in length). Are the two hexagons similar? Why or why not?
2. Frank enlarges a photo to poster size. The original photo is 4 inches by 6 inches. If Frank enlarges it to 1 m by 1.5 m , will it be similar in shape to the original? (Hint: Draw a diagram)
3. Are the following shapes similar? Show your work to support your answer.

4. One cylinder has a radius of 25 cm and a height of 35 cm . Another cylinder has a radius of 30 cm and a height of 40 cm . Are the cylinders similar? Show your calculations. (fill in the diagram)

5.2 cm on a map refers to 60 km in real life. If Chilliwack to Whistler is 191 km , how far would that be on the map?
5. The scale on a map is $2.5 \mathrm{~cm}: 500 \mathrm{~m}$.
a) What distance is represented by a $12.5-\mathrm{cm}$ segment on the map?
b) How long would a segment on the map be if it represented 1.5 km ?
6. Colin states that the following two figures are similar, but Tai disagrees, saying that they don't have enough information. Who is right? Show your calculations.

7. While he was at the pet food store, Jeremy saw three different sized dog mats. They measured 36 inches by 28 inches, 27 inches by 21 inches, and 24 inches by 18 inches. Are all the mats similar? Show your calculations.
