

Set E2 ★ Independent Worksheet 2



INDEPENDENT WORKSHEET

Rachel's Outfits

Rachel just got 4 new t-shirts and 3 pairs of pants for summer vacation. One of her new t-shirts is pink. Another is purple. Another is yellow, and the fourth one is turquoise. She got a purple pair of pants, a white pair of pants, and a turquoise pair of pants.

1 How many different outfits do you think Rachel will be able to make with her new shirts and pants? Explain your prediction.

2 The fundamental counting principle says you can multiply the number of shirts by the number of pants to figure out how many different outfits Rachel can make. Try it here.

$$\underline{\quad} \text{ shirts} \times \underline{\quad} \text{ pairs of pants} = \underline{\quad} \text{ different outfits}$$

3 Make a chart or a tree diagram below to show how many outfits Rachel can make. Use a separate piece of paper if you do not have enough room.



4 Is there any advantage to making a chart or tree diagram instead of using the fundamental counting principle? Explain your answer.