**Task card 1** Dilations & Scale Factor

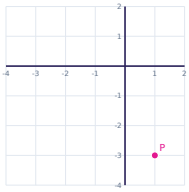
A dilation maps P(6, 6) to P'(3, 3). What is the scale factor?

**Task card 2** Dilations & Scale Factor

A figure is dilated by a scale factor of $\frac{1}{3}$. The area of the image is how many times the area of the original? (Write a whole number or fraction.)

**Task card 3** Dilations & Scale Factor

Dilate P(1, -3) by a scale factor of 3. What are the coordinates of P'?




**Task card 4** Dilations & Scale Factor

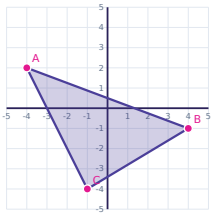
A dilation maps P(-2, -4) to P'(-6, -12). What is the scale factor?

**Task card 5** Dilations & Scale Factor

A figure is dilated by a scale factor of $\frac{3}{2}$. The area of the image is how many times the area of the original? (Write a whole number or fraction.)

**Task card 6** Dilations & Scale Factor

Triangle ABC is dilated by a scale factor of 4. What are the coordinates of A'?



**Task card 7** Dilations & Scale Factor

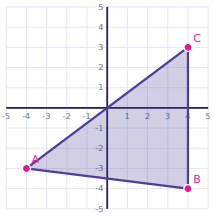
A dilation maps P(4, -1) to P'(8, -2). What is the scale factor?

**Task card 8** Dilations & Scale Factor

A figure is dilated by a scale factor of $\frac{5}{2}$. The area of the image is how many times the area of the original? (Write a whole number or fraction.)

**Task card 9** Dilations & Scale Factor

Triangle ABC is dilated by a scale factor of 2. What are the coordinates of B'?




**Task card 10** Dilations & Scale Factor

A dilation maps P(12, -6) to P'(8, -4). What is the scale factor?

**Task card 11** Dilations & Scale Factor

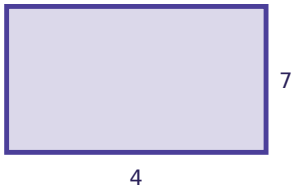
A figure is dilated by a scale factor of 4. The area of the image is how many times the area of the original? (Write a whole number or fraction.)

**Task card 12** Dilations & Scale Factor

A dilation maps P(-3, -3) to P'(-9, -9). What is the scale factor?

**Task card 13** Dilations & Scale Factor

A rectangle is 4 units long and 7 units wide. It is dilated by a scale factor of 2. How long is the longer side of the image?




**Task card 14** Dilations & Scale Factor

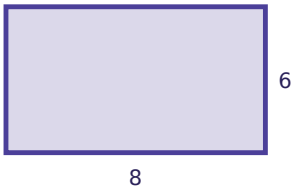
A dilation maps P(12, 16) to P'(3, 4). What is the scale factor?

**Task card 15** Dilations & Scale Factor

A dilation maps P(8, 8) to P'(20, 20). What is the scale factor?

**Task card 16** Dilations & Scale Factor

A rectangle is 8 units long and 6 units wide. It is dilated by a scale factor of 3. How long is the longer side of the image?




**Task card 17** Dilations & Scale Factor

A dilation maps P(8, -4) to P'(2, -1). What is the scale factor?

**Task card 18** Dilations & Scale Factor

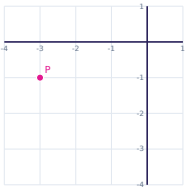
A dilation maps P(-4, -6) to P'(-10, -15). What is the scale factor?

**Task card 19** Dilations & Scale Factor

A figure is dilated by a scale factor of 3. The area of the image is how many times the area of the original? (Write a whole number or fraction.)

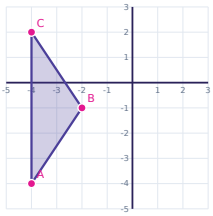
**Task card 20** Dilations & Scale Factor

Dilate P(-3, -1) by a scale factor of 4. What are the coordinates of P'?




**Task card 21** Dilations & Scale Factor

Triangle ABC is dilated by a scale factor of 3. What are the coordinates of C'?

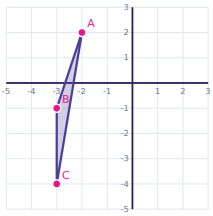



**Task card 22** Dilations & Scale Factor

A dilation maps P(8, -8) to P'(12, -12). What is the scale factor?

**Task card 23** Dilations & Scale Factor

Triangle ABC is dilated by a scale factor of 4. What are the coordinates of B'?




**Task card 24** Dilations & Scale Factor

A dilation maps P(8, -8) to P'(2, -2). What is the scale factor?

# Dilations & Scale Factor Task Cards

Recording sheet · Grade 8 · All dilations are centered at the origin. Write points as (x, y) and scale factors as whole numbers or fractions.

Scan to check your answers

Name: _____ Date: _____

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |

# Dilations & Scale Factor Task Cards: Answer Key

Grade 8 · Hard

The answers online

| | | |
|---|---|---|
| **1.** $\frac{1}{2}$ | **2.** $\frac{1}{9}$ | **3.** (3, -9) |
| **4.** 3 | **5.** $\frac{9}{4}$ | **6.** (-16, 8) |
| **7.** 2 | **8.** $\frac{25}{4}$ | **9.** (8, -8) |
| **10.** $\frac{2}{3}$ | **11.** 16 | **12.** 3 |
| **13.** 14 | **14.** $\frac{1}{4}$ | **15.** $\frac{5}{2}$ |
| **16.** 24 | **17.** $\frac{1}{4}$ | **18.** $\frac{5}{2}$ |
| **19.** 9 | **20.** (-12, -4) | **21.** (-12, 6) |
| **22.** $\frac{3}{2}$ | **23.** (-12, -4) | **24.** $\frac{1}{4}$ |