

Mathematical processes



Name _____ Class_____ Date_____



Renee is solving the **expression**, $6x^2 + 2(x - 4) - 12$ when x = 8. She decides to solve 2(x - 4) first. This strategy will work when solving the problem.

True or false?

- A true
- **B** false



Zackary needs to figure out which ordered pair will make the equation, 2x - 7 = y, true. Which strategy will not help him find the answer?

- A guessing and checking
- B acting it out
- C drawing a graph
- D making a table of values



Amanda is trying to figure out if $\sqrt{8}$ is rational or irrational. She finds out that the $\sqrt{8}$ is equal to 2.82847125. What strategy would help her?



Dale is deciding if a triangle with the sides of 15 and 36 and a hypotenuse of 39 is a right triangle. What strategy would be the best for him to use?





PREVIEW



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- **B** 8 + 4 = 12
- $C 2^2 = 4$
- D 16 should be ÷ 4 first

- **B** The sign, <, should be >.
- **C** $48 \div -6 = -8$
- D y must be alone



A test question asks with which transformation does a figure's size or shape change. Karl knows the transformations are reflection, rotation, dilation, and translation. He reasons that the answer is dilation. Why is he correct?

- A A reflection makes a mirror image.
- **B** A rotation turns a figure.
- C A dilation shrinks or enlarges a figure.
- A translation shifts a figure.



The two triangles shown are similar. Why is angle A ≠ angle F?

- A ∠A and ∠F are in the same spot.
- B LB = LE
- C BC is congruent to EF.
- Similar triangles have certain equal angle measures.



Mathematical processes



Name Class Date Renee is solving the expression, Zackary needs to figure out which $6x^2 + 2(x - 4) - 12$ when x = 8. ordered pair will make the equation, She decides to solve 2(x - 4) first. 2x - 7 = y, true. Which strategy will This strategy will work when solving not help him find the answer? A the problem. B A guessing and checking True or false? B acting it out C drawing a graph A true D making a table of values **B** false 3 Dale is deciding if a triangle with the Amanda is trying to figure out if $\sqrt{8}$ is rational or irrational. She finds out that sides of 15 and 36 and a hypotenuse of the $\sqrt{8}$ is equal to 2.82847125. 39 is a right triangle. What strategy would be the best for him to use? What strategy would help her? (B)5 A **PREVIEW** Please Sign In or Sign Up to download the printable version of this worksheet B **B** 8 + 4 = 12**B** The sign, <, should be >. $C 2^2 = 4$ **C** $48 \div -6 = -8$ D 16 should be ÷ 4 first D y must be alone A test question asks with which transformation 10 The two triangles shown are similar. does a figure's size or shape change. Karl Why is angle A ≠ angle F? knows the transformations are reflection, rotation, dilation, and translation. He reasons A LA and LF are in that the answer is dilation. Why is he correct? (D)the same spot. B LB = LE A A reflection makes a mirror image. C BC is congruent to EF. **B** A rotation turns a figure. D Similar triangles have certain equal C A dilation shrinks or enlarges a figure. angle measures. A translation shifts a figure.