

Illustration of the Mathematical Practices

The following illustrations help clarify the meaning of the 8 mathematical practices. They were taken from :
<http://gsesinstructionalcoach.weebly.com/standards-for-mathematical-practice.html>


1 **Make sense of problems and persevere in solving them.**



Keep on going !

2 **Reason abstractly and quantitatively.**

Write a story for the mathematical equation

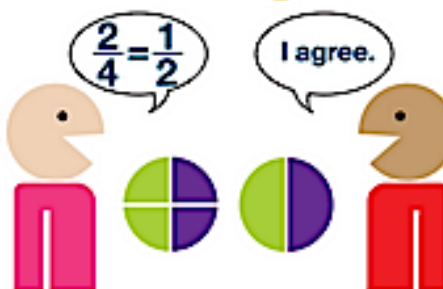


$\frac{1}{2} \times 4$

DeJuan exercises $\frac{1}{2}$ hour a day for 4 days.
How many total hours does he exercise?

Think what makes sense.

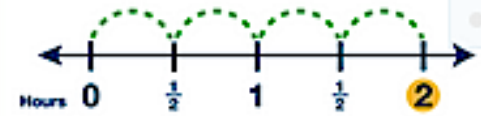
3 **Construct viable arguments and critique the reasoning of others.**



$\frac{2}{4} = \frac{1}{2}$ I agree.

Talk and explain.

4 **Model with mathematics.**



Hours 0 $\frac{1}{2}$ 1 $\frac{1}{2}$ 2

$\frac{1}{2} \times 4 = 2$ or $4 \times \frac{1}{2} = 2$

Show your thinking.

5**Use appropriate tools strategically.**

$3 \times 2 = 6$

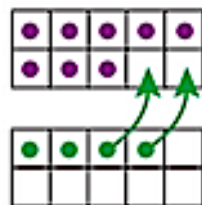
**Use the right tools.****6****Attend to precision.**symbol: equals
(the same as)

$120 \text{ minutes} = 2 \text{ hours}$

units of measure

Check your work.**7****Look for and make use of structure.**

$8 + 4 = 12$

**See the pattern or connection.****8****Look for and express regularity in repeated reasoning.****See the pattern or connection.**