

Rigor

Task Handout, Grade 6

“A social justice priority in mathematics education is to openly challenge deficit thinking and the institutional tools and practices that perpetuate static views about children and their mathematics competencies. Eliminating the deficit discourse by focusing on learning rather than labels is a key step toward a more just and equitable mathematics education.” —*National Council of Supervisors of Mathematics and TODOS: Mathematics for All*

Conceptual Understanding Task #1

Task

Rubi was paid \$24 to sweep 4 walks. Which of the following can be represented by an equivalent ratio? Explain your thinking.

- \$6 to sweep 1 walk
- \$12 to sweep 3 walks
- \$30 to sweep 5 walks

Anthea hiked 6 miles in 2 hours. Which of the following can be represented by an equivalent ratio? Explain your thinking.

- 4 miles in 1 hour
- 12 miles in 4 hours
- 9 miles in 3 hours

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Conceptual Understanding Task #2

Task

Which of the following expressions are equivalent? Why? If an expression has no match, write 2 equivalent expressions to match it.

- a. $2(x + 4)$
- b. $8 + 2x$
- c. $2x + 4$
- d. $3(x + 4) - (4 + x)$
- e. $x + 4$

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Procedural Skills and Fluency Task #1

Divide using the division algorithm.

1. $1,634 \div 19$

2. $2,450 \div 25$

3. $22,274 \div 37$

4. $21,361 \div 41$

Source: EngageNY.org of the New York State Education Department. Grade 6 Mathematics, Module 2, Topic C, Lesson 13. Available from <https://www.engageny.org/resource/grade-6-mathematics-module-2-topic-c-lesson-13/file/40826> accessed 26 May 2018. Licensed by EngageNY under CC BY-NC-SA 3.0.

Procedural Skills and Fluency Task #2

Task

Sophia's dad paid \$43.25 for 12.5 gallons of gas. What is the cost of one gallon of gas?

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Application Task #1

A 6th grade math teacher can grade 25 homework assignments in 20 minutes. Is he working at a faster rate or slower rate than grading 36 homework assignments in 30 minutes?

Source: EngageNY.org of the New York State Education Department. Grade 6 Mathematics, Module 1, Topic C, Lesson 23. Available from <https://www.engageny.org/resource/grade-6-mathematics-module-1-topic-c-lesson-23/file/40126> accessed 26 May 2018. Licensed by EngageNY under CC BY-NC-SA 3.0.

Application Task #2

Exercise

- Each week Quentin earns \$30. If he saves this money, create a graph that shows the total amount of money Quentin has saved from week 1 through week 8.
- Write an equation that represents the relationship between the number of weeks that Quentin has saved his money, w , and the total amount of money in dollars that he has saved, s . Then, name the independent and dependent variables. Write a sentence that shows this relationship.

Source: EngageNY.org of the New York State Education Department. Grade 6 Mathematics, Module 4, Topic H, Lesson 32. Available from <https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-h-lesson-32/file/44676> accessed 26 May 2018. Licensed by EngageNY under CC BY-NC-SA 3.0.