

Mathematics Grade 6 Unit 03: Addition and Subtraction of Fractions and Decimals 2012-2013



1 Plums cost \$0.32 each. Which is the closest estimate to the cost of 5 plums?

- A \$2.50
- B \$1.50
- C \$1.00
- D \$2.00

2 Hannah is walking in a 5-mile walkathon to raise money for a charity. She has

completed $2\frac{2}{3}$ miles of the walkathon. Which expression shows the number of miles she has left to walk?

- F $5 + 2\frac{2}{3}$
- G $5 \div 2\frac{2}{3}$
- H $5 \times 2\frac{2}{3}$
- J $5 - 2\frac{2}{3}$

3 After a sewing project, the home economics teacher had four pieces of fabric that

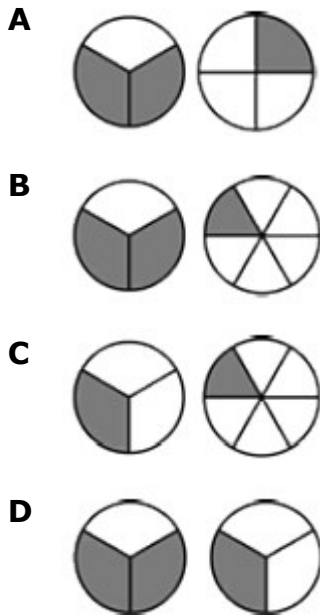
were $\frac{5}{6}$ yard, $1\frac{1}{2}$ yards, $\frac{1}{4}$ yard, and $2\frac{1}{3}$ yards long. How many yards of fabric were left over all together?

- A $3\frac{8}{15}$ yards
- B $4\frac{1}{12}$ yards
- C $4\frac{11}{12}$ yards
- D $5\frac{1}{6}$ yards

- 4 In Haley's class, $\frac{3}{8}$ of the students had one pet, while $\frac{1}{6}$ of the students had more than one pet. The rest of the students did not have any pets. What fractional part of the class did not have a pet?

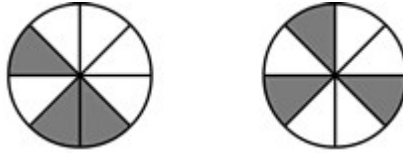
- 5 Which figure best represents this expression?

$$\frac{2}{3} + \frac{1}{6}$$



- 6 A roll of vinyl-coated fence costs \$52.45. A roll of metal fence costs \$41.49. How much more does the roll of vinyl-coated fence cost?
- F \$10.04
- G \$10.06
- H \$10.96
- J \$11.96

- 7 After a birthday party, there was some extra pizza remaining. The shaded portions below represent the leftover pieces of pizza.



What fractional part of one whole pizza was left over?

- A** $\frac{6}{16}$
- B** $\frac{3}{5}$
- C** $\frac{3}{4}$
- D** $\frac{6}{5}$
- 8 Lee made a sandbox for his little brother. The sandbox measured 12.25 feet by 15.125 feet. What is the perimeter of the sandbox?
- F** 16.350 feet
- G** 27.375 feet
- H** 32.70 feet
- J** 54.75 feet

9

A motel pool had $6\frac{1}{4}$ feet of water in it.

The pool keeper drained $\frac{1}{2}$ foot of water out of the pool.

A. Draw a picture or use a number line to illustrate the changes in the water level of the pool.

B. Write an expression that could be used to find the water level in the pool after $\frac{1}{2}$ foot of water was drained out.

C. What was the depth of the water in the pool after $\frac{1}{2}$ foot of water was drained out?

- 10** Mikhail bought a CD for \$13.99. He also bought two games for his Xbox 360 that cost \$49.99 each and another game that cost \$39.99. How much change would he receive back if he gave the clerk \$200.00 in cash?
- F** \$46.04
G \$79.04
H \$96.03
J \$96.23

- 11** The drill team wanted to raise money by making and selling corsages for homecoming. They ordered 11.3 meters of maroon ribbon, $8\frac{3}{4}$ m of black ribbon, 9.5 m of silver ribbon, and $10\frac{1}{4}$ m of white ribbon. About how many meters of ribbon was ordered?
- A** 20 meters
B 30 meters
C 40 meters
D 50 meters

- 12** Caleb works 15 hours a week at the car wash. On Friday he worked $2\frac{3}{4}$ hours, on Saturday he worked 5 hours, and on Sunday he worked 4.25 hours.

A. How many more hours a week does Caleb need to work to meet his 15 hours a week quota?

B. What fraction of the weekly quota is Caleb still missing?

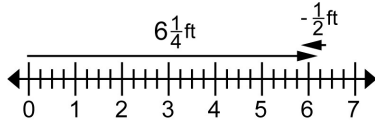
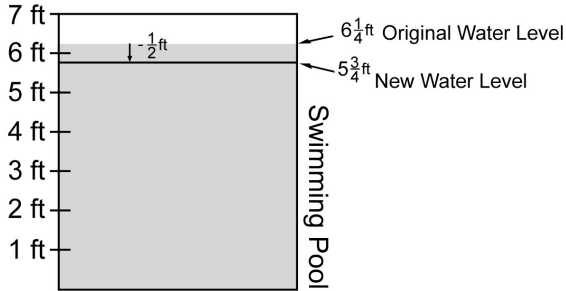
Test Key

Mathematics Grade 6 Unit 03: Addition and Subtraction of Fractions and Decimals 2012-2013

##	Item #	Correct Answer	Primary SE	Secondary SE	Obj/Cat
1	M061086590D	D	6.2(D) [S]	6.11(A) [P]	STAAR: M1
2	M061086593D	J	6.2(A) [S]	None	STAAR: M1
3	M063022623	C	6.2(B) [R]	None	STAAR: M1
4	M061086597D	$\frac{11}{24}$	6.2(B) [R]	6.11(B) [P]	STAAR: M1
5	M063044882	B	6.2(A) [S]	None	STAAR: M1
6	M061127210D	H	6.2(B) [R]	None	STAAR: M1
7	M063022587	C	6.2(A) [S]	6.11(D) [P]	STAAR: M1
8	M061127215D	J	6.2(B) [R]	6.11(B) [P]	STAAR: M1
9	M063022618	0 to 3	6.2(A) [S]	6.13(B) [P]	STAAR: M1
10	M061127218D	F	6.2(B) [R]	6.11(B) [P]	STAAR: M1
11	M06018064CS	C	6.2(D) [S]	None	STAAR: M1
12	M061127221D	A. Caleb needs to work 3 more hours. B. He is missing $\frac{1}{5}$ or $\frac{3}{15}$ of his needed hours.	6.2(B) [R]	6.11(A) [P]	STAAR: M1

Scoring Rubrics

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A.

B. $6\frac{1}{4} - \frac{1}{2}$

C. $5\frac{3}{4}$ feet

3	The response shows full understanding of the essential mathematics applicable to the task and a sound approach toward solution that includes logical reasoning and appropriate conclusions. Computation and procedures used are generally accurate, but the response may contain minor computational or procedural flaws that do not detract from evidence of full understanding.
2	The response shows a satisfactory understanding of the essential mathematics applicable to the task, but reasoning may not be completely clear, and there may be minor flaws in computation and/or use of procedures as a result of carelessness or non-essential misunderstandings. The flaws do not detract from evidence of satisfactory understanding. A score of 2 may also be earned if the response is partially correct, but some aspect of the task is omitted.
1	The response indicates limited understanding of the essential mathematics applicable to the task. While an effort is made to address the task, omissions and/or errors related to insufficient mathematical knowledge or incorrect application of skills or procedures bring into question that student's ability to deal successfully with tasks of this type.
0	The response indicates no understanding of the essential mathematics applicable to the task, or there is no response.