

## 7.6 Proportions &amp; Problem Solving with Rational Equations DAY TWO CYU

Use when you get it right all by yourself

*S* Use when you did it all by yourself, but made a silly mistake

*H* Use when you could do it alone with a little help from teacher or peer

*G* Use when you completed the problem in a group

*X* Use when a question was attempted but wrong (get help)

*N* Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Converting words to equations	5, 6, 9, 10	1 - 4	7, 8
Vocabulary terms	5, 6, 9, 10	1 - 4	7, 8
Solving Literal Equations (spiral review)	11		

Solve the following. Show the set up and then the work to earn full credit for the answer.

1. Three times the reciprocal of a number equals nine times the reciprocal of six. Find the number.

2

2. Twelve divided by the sum of  $x$  and two equals the quotient of four and the difference of  $x$  and two.

4

3. If twice a number added to three is divided by the number plus one, the result is three halves. Find the number.

-3

4. A number added to the product of six and the reciprocal of the number equals negative five. Find the number.

-3 or -2

5. One fourth equals the quotient of a number and eight. Find the number.

2

6. Four times a number added to five is divided by six. The result is seven-halves. Find the number.

4

7. Two divided by the difference of a number and three minus four divided by the number plus three, equals eight times the reciprocal of the difference of the number squared and nine. What is the number?

5

8. If fifteen times the reciprocal of a number is added to the ratio of nine times the number minus seven and the number plus two, the result is nine. What is the number?

3

9. The quotient of a number and three, minus one, equals five-thirds. Find the number.

8

10. The quotient of a number and five, minus one, equals seven-fifths. Find the number.

12

11. Solve  $D = RT$  for ...

a) for R.

b) for T.

$$R = \frac{D}{T}$$

$$T = \frac{D}{R}$$

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**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

