Meal Out

T1

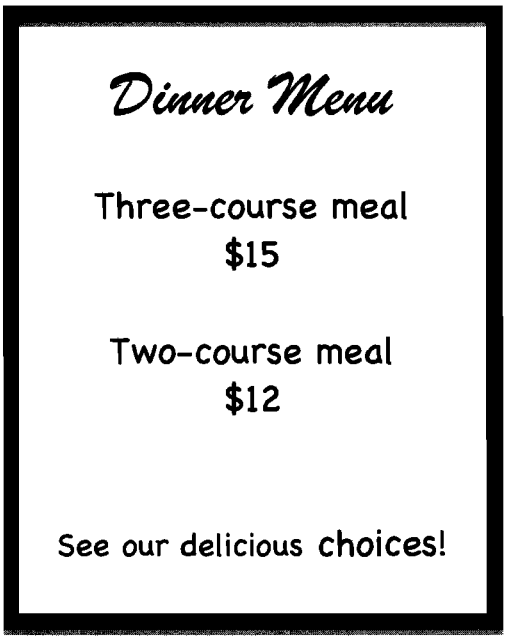
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12(10-x)=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12(10-x)=141$
$15x+120-12x=141$
$15x-12x=21$
$3x=21$
$x=7$

$(15\cdot7)+(12\cdot3)=141$

Number who had three-course meals 7

Number who had two-course meals 3

Meal Out

T2

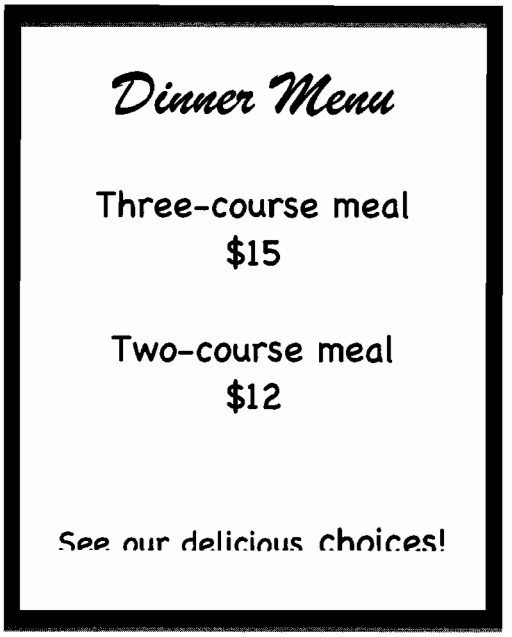
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12y=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15 \cdot 5 = 75$
$12 \cdot 5 = 60$
135

$15 \cdot 7 = 105$
$12 \cdot 3 = 36$
141

$15(7) + 12(3) = 141$

$x = 7$
$y = 3$

Number who had three-course meals: 7

Number who had two-course meals: 3

Meal Out

T3

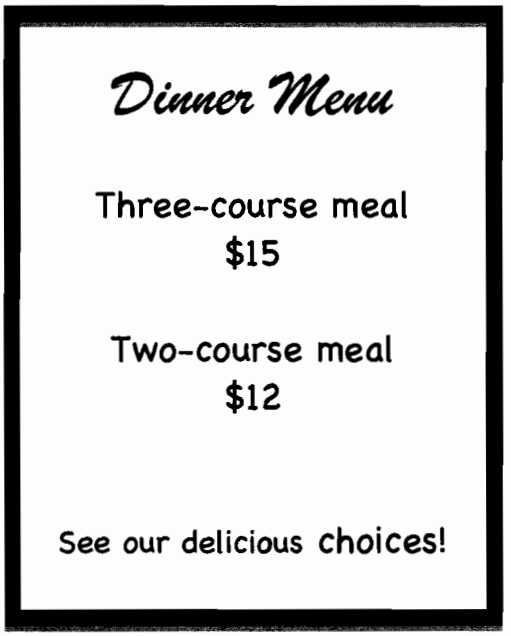
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12(10-x)=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15(7)+12(10+7)$
$15(7)+12(3)$
$105+36$
141

Number who had three-course meals 7

Number who had two-course meals 3

Meal Out

T4

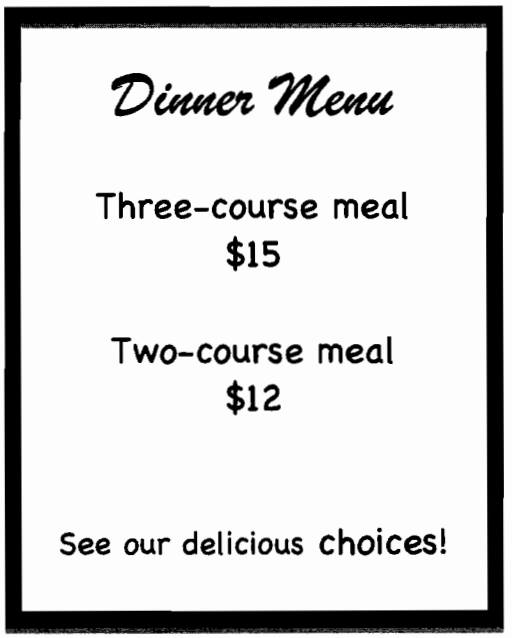
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12x=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12x=141$

$\frac{27x}{27} = \frac{141}{27}$

$x = 5.22$

$15(5.22)+12(5.22)=141$ ✓

Number who had three-course meals: 5

Number who had two-course meals: 5

Meal Out

T5

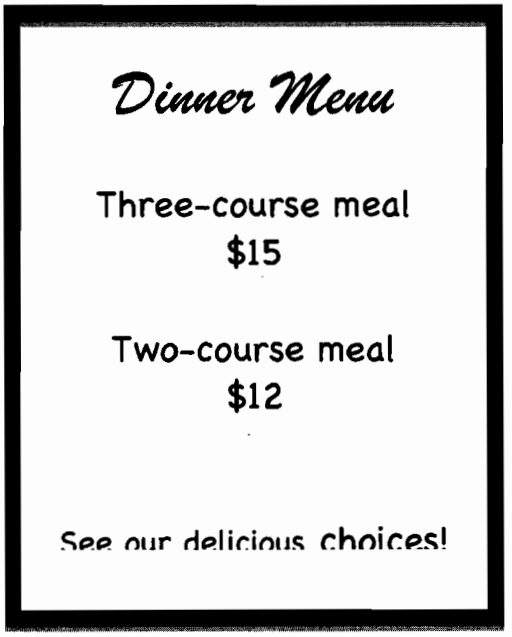
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12(10-x)=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12(10-x)=141$

$15x+120-12x=141$

$-12x \quad -12x$

$3x+120=141$

$-120 \quad -120$

$\frac{3x}{3}=\frac{21}{3}$ $\quad x=7$

$10-7=3$

Number who had three-course meals 7

Number who had two-course meals 3

Meal Out

S1

This problem gives you the chance to:

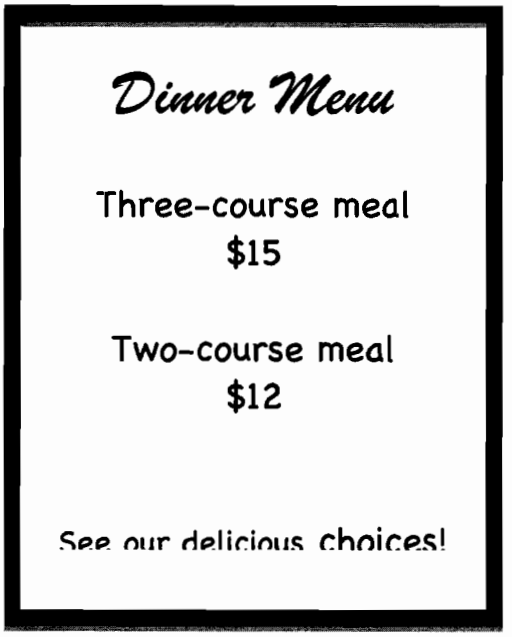
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$$15x + 12x = 141$$
$$15x + 12(x - 10) = 141$$
$$15x + 12(10 - x) = 141$$
$$(15 + 12)x = 141$$
$$15x + 12y = 141$$

Which is the correct equation? $15x + 12(10 - x) = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

~~19~~
~~28~~
3, 7 ✓

$15x + 12(10 - x) = 141$ guess & check

$15(7)$ $12 \cdot 3 =$

$105 + 36 = 141$

Number who had three-course meals 7

Number who had two-course meals 3

7

Meal Out

S2

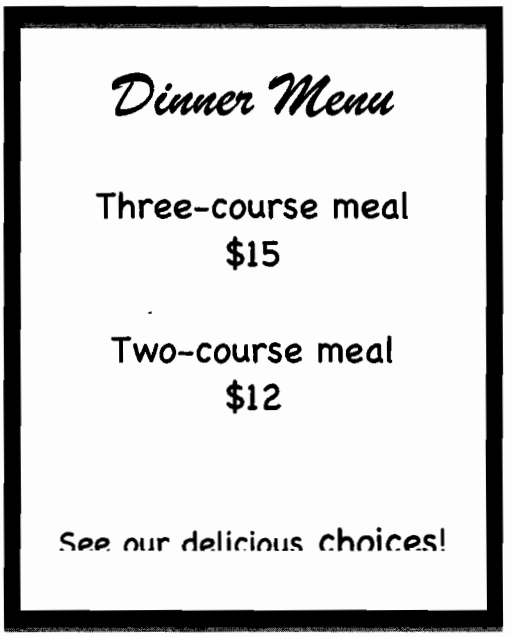
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x + 12(10 - x) = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x + 12(10 - x) = 141$

$-15x \qquad -15x$

$12(10 - x) = 126x$

$\frac{12(10-x)}{12} = \frac{126x}{12}$

$-\frac{17}{12} = \frac{21}{2}x$

Number who had three-course meals: 7

Number who had two-course meals: 3

Meal Out

S3

This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.

Dinner Menu

Three-course meal
$15

Two-course meal
$12

See our delicious choices!

1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? 15x+12y=141

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

15·7=105
12·3=36
10 meals

105
+ 36
141

Number who had three-course meals 7

Number who had two-course meals 3

Meal Out

S4

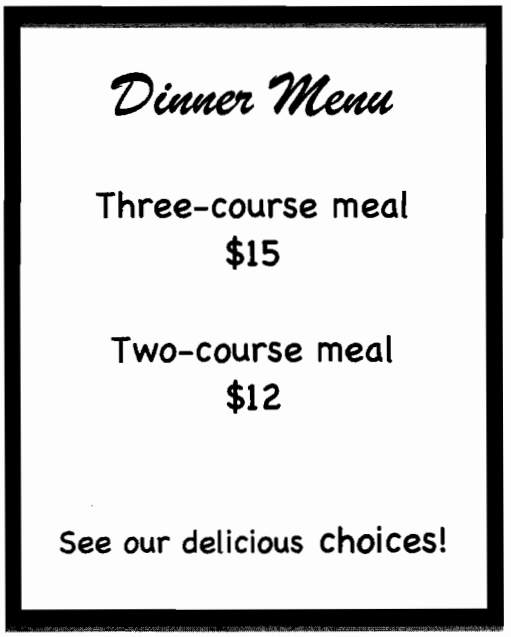
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

$15(2)+12(10-2)=141$

Which is the correct equation? $15x+12(10-x)=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12(10-x)=141$
$-15x \quad +15x$
$12(10-x)=141-15x$
$120-12x=141-15x$
$+12 \quad +12x$
$120=141-3x$
$-141 \quad -141$
$\frac{-21}{-3} = \frac{-3x}{-3}$
$7 = x$

check
$15(7)+12(10-7)=141$ ✓
$141 = 141$

Number who had three-course meals 7

Number who had two-course meals 3

Meal Out

S5

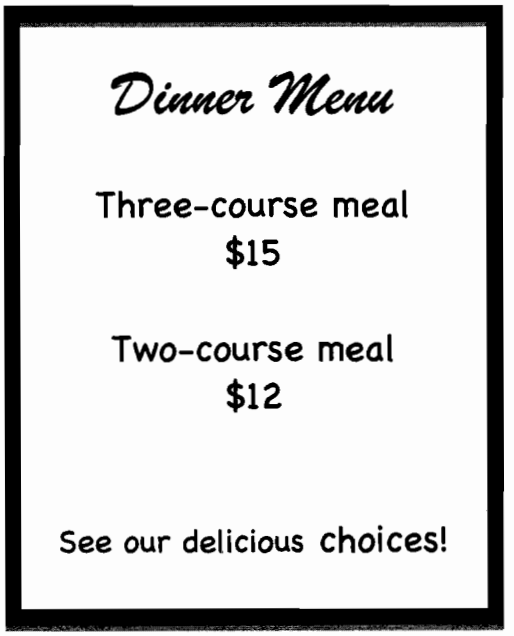
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x + 12(10 - x) = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15 \times 1 = 15$, $12 \times 9 = 108$ NO

$15 \times 9 = 135$ NO, $12 \times 1 = 12$

$15 \times 7 = 105$ YES, $12 \times 3 = 36$, 141

Number who had three-course meals: 7

Number who had two-course meals: 3

Meal Out

S6

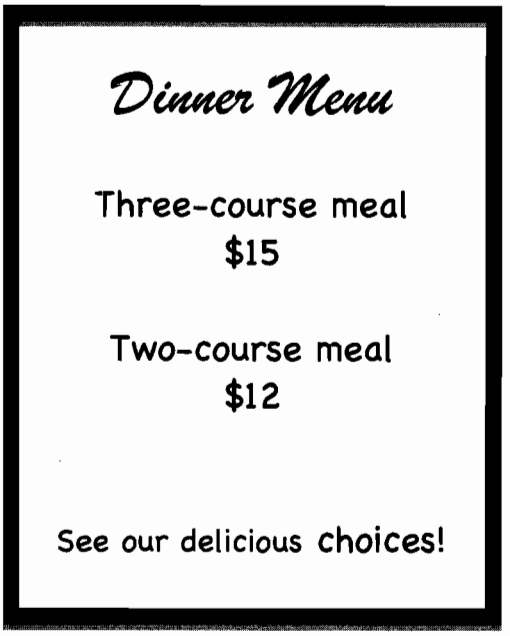
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$$15x + 12x = 141$$
$$15x + 12(x - 10) = 141$$
$$15x + 12(10 - x) = 141$$
$$(15 + 12)x = 141$$
$$15x + 12y = 141$$

Which is the correct equation? $15x+12x=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12x=141$
$-12x \quad -12x$
$15x = 141-12x$
$+12x \quad +12x$
$27x = 141$
$\frac{27x}{27} = \frac{141}{27}$
$x = 47$

Number who had three-course meals 6

Number who had two-course meals 4

7

Meal Out

S7

This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

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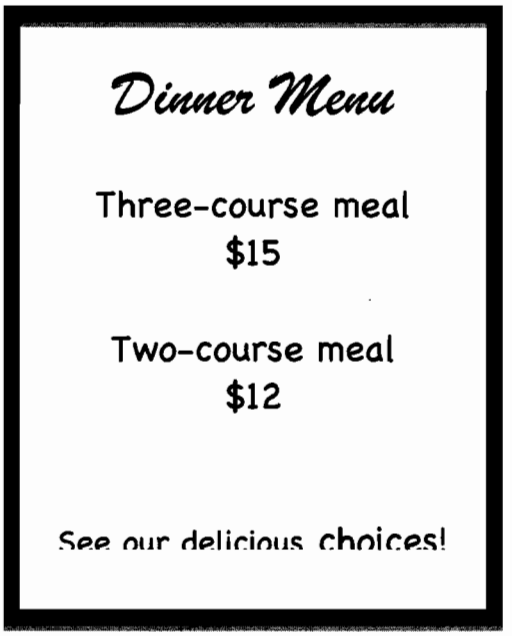
The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

~~$15x + 12(x - 10) = 141$~~

~~$15x + 12(10 - x) = 141$~~

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x + 12y = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15(5) + 12(5)$
135

$15(7) + 12(3)$
141

$15(6) + 12(4)$
138

Number who had three-course meals: 7

Number who had two-course meals: 3

7

Meal Out

S8

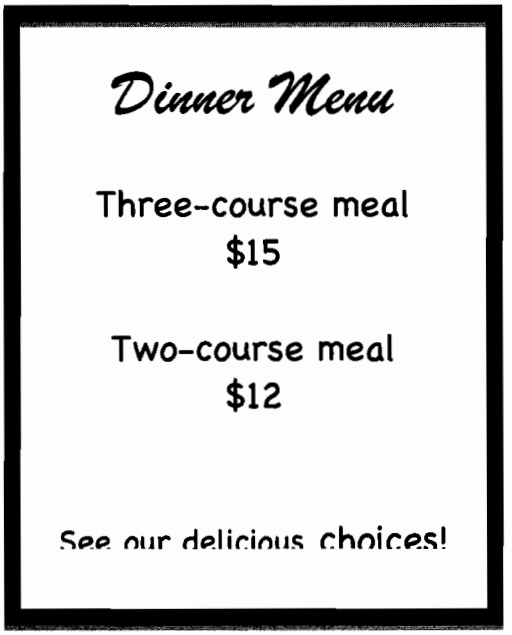
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x + 12(10 - x) = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$7 \cdot 15 = 105$

$3 \cdot 12 = 36$

$105 + 36 = 141$

Number who had three-course meals: 7

Number who had two-course meals: 3

Meal Out

S9

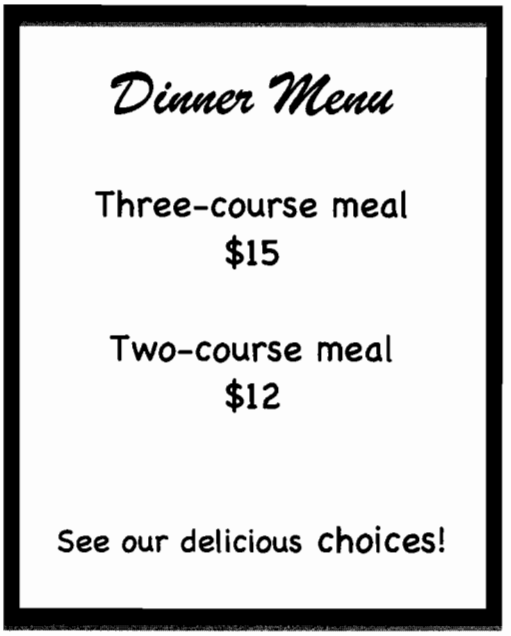
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

$15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

$(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $(15+12)x = 141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15 \times 7 = 105$
$12 \times 3 = 36$

$105 + 36 = 141$

$x = 141$

Number who had three-course meals: 7

Number who had two-course meals: 3

Meal Out

S10

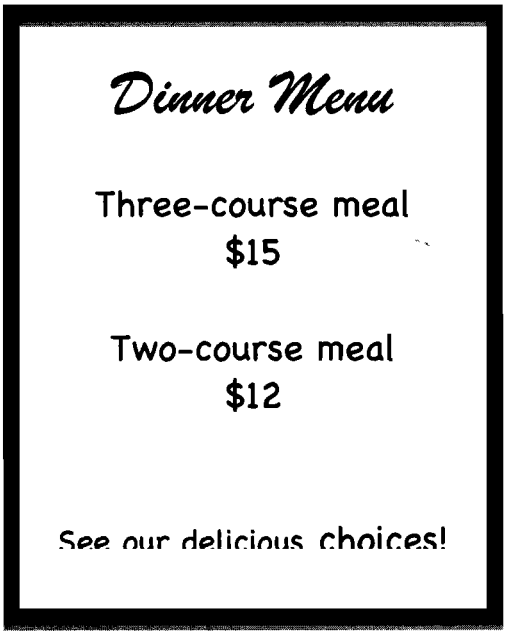
This problem gives you the chance to:
- use algebra to represent a real situation
- solve an algebraic equation
- check that the answer works

Ten friends go out for a meal.

Some friends have three-course meals and the rest have two-course meals.

The bill for all 10 meals is $141 dollars.

The number of people who have three-course meals is x.



1. One of these equations can be solved to find the correct value of x.

× $15x + 12x = 141$

$15x + 12(x - 10) = 141$

$15x + 12(10 - x) = 141$

× $(15 + 12)x = 141$

$15x + 12y = 141$

Which is the correct equation? $15x+12(10-x)=141$

2. Solve the equation and find the number of people who had three-course meals and the number of people who had two-course meals.
Show how you figured it out and show that you have tested your answers to see they are correct.

$15x+12(10-x)=141$

$15x+120-12x=141$

$-120 \quad -120$

$15x-12x \mid 3x=21$

$\frac{3x}{3}=\frac{21}{3}$

$x=7$

$7*15=105$

$3*12=36$

141

Number who had three-course meals 7

Number who had two-course meals 3