



# Turn Around

I can explain why addition is commutative but subtraction is not.



These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect.

$14 + 6 \times = 20$

$17 - 25 \times = 8$

$12 + 6 \times = 18$

$6 + 14 \times = 20$

$25 - 8 \times = 17$

$12 - 6 \times = 18$

$14 - 6 \times = 20$

$17 + 8 \times = 25$

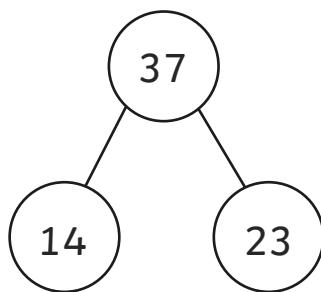
$18 - 6 \times = 12$

$20 - 14 \times = 6$

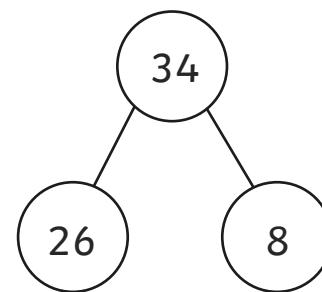
$8 + 17 \times = 25$

$6 + 12 \times = 18$

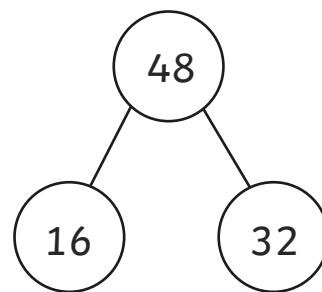
Write the number sentences on the boats for each of the part-whole diagrams. Get your partner to use equipment to check your number sentences.



$\text{[empty boat]} \times = 37$



$\text{[empty boat]} \times = 34$



$\text{[empty boat]} \times = 48$

$\text{[empty boat]} \times = 37$

$\text{[empty boat]} \times = 34$

$\text{[empty boat]} \times = \boxed{\phantom{00}}$

Use equipment to explain why addition is commutative.

Use equipment to explain why subtraction is not commutative.



# Answers

These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect.

$$14 + 6 \quad \times \quad = 20$$

~~$$17 - 25 \quad \times \quad = 8$$~~

$$12 + 6 \quad \times \quad = 18$$

$$6 + 14 \quad \times \quad = 20$$

$$25 - 8 \quad \times \quad = 17$$

~~$$12 - 6 \quad \times \quad = 18$$~~

~~$$14 - 6 \quad \times \quad = 20$$~~

$$17 + 8 \quad \times \quad = 25$$

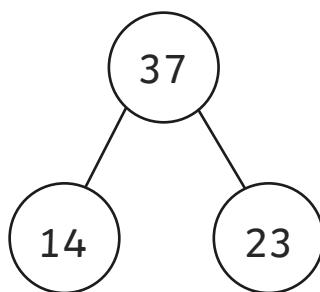
$$18 - 6 \quad \times \quad = 12$$

$$20 - 14 \quad \times \quad = 6$$

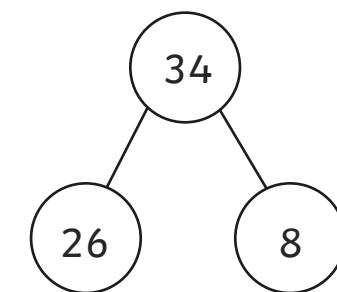
$$8 + 17 \quad \times \quad = 25$$

$$6 + 12 \quad \times \quad = 18$$

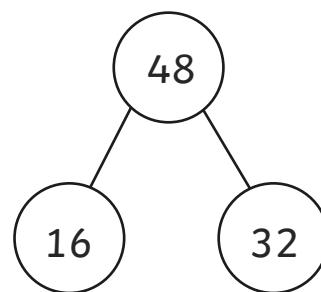
Write the number sentences on the boats for each of the part-whole diagrams. Get your partner to use equipment to check your number sentences.



$$14 + 23 \quad \times \quad = 37$$



$$26 + 8 \quad \times \quad = 34$$



$$16 + 32 \quad \times \quad = 48$$

$$23 + 14 \quad \times \quad = 37$$

$$8 + 26 \quad \times \quad = 34$$

$$32 + 16 \quad \times \quad = 48$$

$$37 - 23 \quad \times \quad = 14$$

$$34 - 8 \quad \times \quad = 26$$

$$48 - 32 \quad \times \quad = 16$$

$$37 - 14 \quad \times \quad = 23$$

$$34 - 26 \quad \times \quad = 8$$

$$48 - 16 \quad \times \quad = 32$$



# Turn Around

I can explain why addition is commutative but subtraction is not.



These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect. Use equipment to explain how you know.

$14 + 6 \times = 20$

$17 - 25 \times = 8$

$12 + 6 \times = 18$

$6 + 14 \times = 20$

$25 - 8 \times = 17$

$12 - 6 \times = 18$

$14 - 6 \times = 20$

$17 + 8 \times = 25$

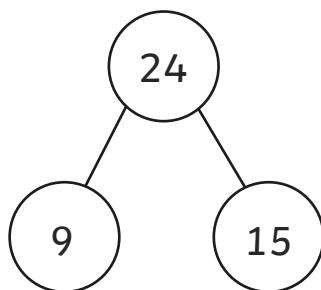
$18 - 6 \times = 12$

$20 - 14 \times = 6$

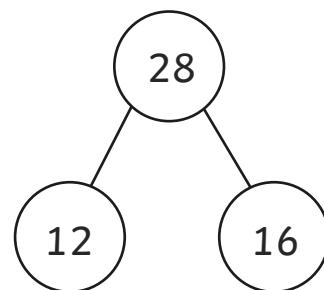
$8 + 17 \times = 25$

$6 + 12 \times = 18$

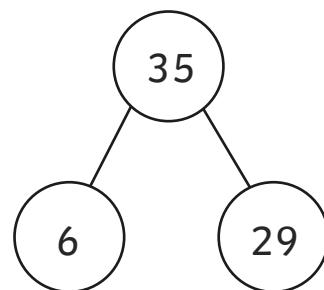
Write the number sentences on the boats for each of the part-whole diagrams. Get your partner to use equipment to check your number sentences.



$\text{[empty boat]} \times = 24$



$\text{[empty boat]} \times = \text{[empty box]}$



$\text{[empty box]} = \text{[empty boat}}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty box]} = \text{[empty boat]}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty box]} = \text{[empty boat]}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty boat]} \times = \text{[empty box]}$

$\text{[empty box]} = \text{[empty boat]}$

Use equipment to explain why addition is commutative.

Use equipment to explain why subtraction is not commutative.



# Answers

These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect. Use equipment to explain how you know.

$$\begin{array}{c} 14 + 6 \\ \text{---} \\ \boxed{20} \end{array}$$

~~$$\begin{array}{c} 17 - 25 \\ \text{---} \\ \boxed{8} \end{array}$$~~

$$\begin{array}{c} 12 + 6 \\ \text{---} \\ \boxed{18} \end{array}$$

$$\begin{array}{c} 6 + 14 \\ \text{---} \\ \boxed{20} \end{array}$$

$$\begin{array}{c} 25 - 8 \\ \text{---} \\ \boxed{17} \end{array}$$

~~$$\begin{array}{c} 12 - 6 \\ \text{---} \\ \boxed{18} \end{array}$$~~

~~$$\begin{array}{c} 14 - 6 \\ \text{---} \\ \boxed{20} \end{array}$$~~

$$\begin{array}{c} 17 + 8 \\ \text{---} \\ \boxed{25} \end{array}$$

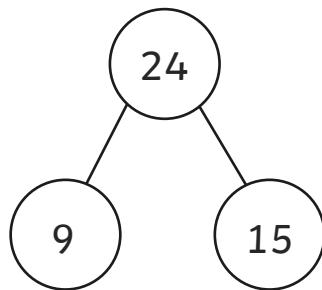
$$\begin{array}{c} 18 - 6 \\ \text{---} \\ \boxed{12} \end{array}$$

$$\begin{array}{c} 20 - 14 \\ \text{---} \\ \boxed{6} \end{array}$$

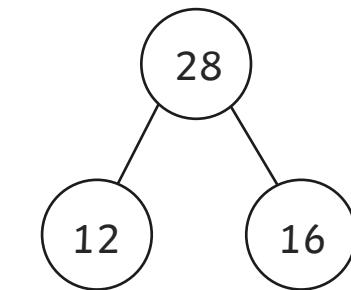
$$\begin{array}{c} 8 + 17 \\ \text{---} \\ \boxed{25} \end{array}$$

$$\begin{array}{c} 6 + 12 \\ \text{---} \\ \boxed{18} \end{array}$$

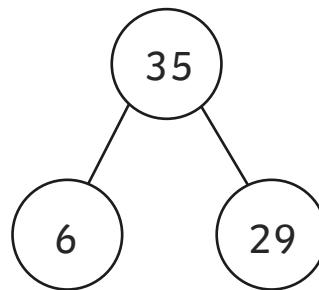
Write the number sentences on the boats for each of the part-whole diagrams. Get your partner to use equipment to check your number sentences.



$$\begin{array}{c} 9 + 15 \\ \text{---} \\ \boxed{24} \end{array}$$



$$\begin{array}{c} 12 + 16 \\ \text{---} \\ \boxed{28} \end{array}$$



$$\begin{array}{c} 35 \\ = \\ \boxed{29 + 6} \end{array}$$

$$\begin{array}{c} 15 + 9 \\ \text{---} \\ \boxed{24} \end{array}$$

$$\begin{array}{c} 16 + 12 \\ \text{---} \\ \boxed{28} \end{array}$$

$$\begin{array}{c} 35 \\ = \\ \boxed{6 + 29} \end{array}$$

$$\begin{array}{c} 24 - 15 \\ \text{---} \\ \boxed{9} \end{array}$$

$$\begin{array}{c} 28 - 12 \\ \text{---} \\ \boxed{16} \end{array}$$

$$\begin{array}{c} 29 \\ = \\ \boxed{35 - 6} \end{array}$$

$$\begin{array}{c} 24 - 9 \\ \text{---} \\ \boxed{15} \end{array}$$

$$\begin{array}{c} 28 - 16 \\ \text{---} \\ \boxed{12} \end{array}$$

$$\begin{array}{c} 6 \\ = \\ \boxed{35 - 29} \end{array}$$



# Turn Around

I can explain why addition is commutative but subtraction is not.



These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect. Use equipment to explain how you know. Write in the correct number sentence to complete the fact family.

$$54 - 36 \times$$

$$= 90 \times$$

$$46 + 28 \times$$

$$= 74 \times$$

$$35 + 29 \times$$

$$= 64 \times$$

$$36 + 54 \times$$

$$= 90 \times$$

$$74 - 28 \times$$

$$= 46 \times$$

$$64 - 29 \times$$

$$= 35 \times$$

$$54 + 36 \times$$

$$= 90 \times$$

$$46 - 74 \times$$

$$= 28 \times$$

$$29 + 35 \times$$

$$= 64 \times$$

$$90 - 54 \times$$

$$= 36 \times$$

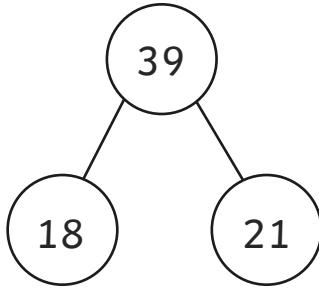
$$28 + 46 \times$$

$$= 74 \times$$

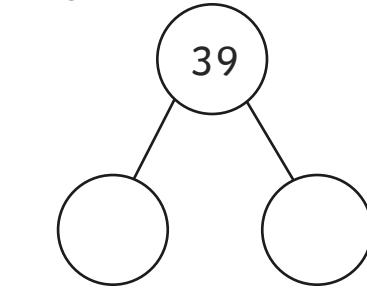
$$35 - 64 \times$$

$$= 29 \times$$

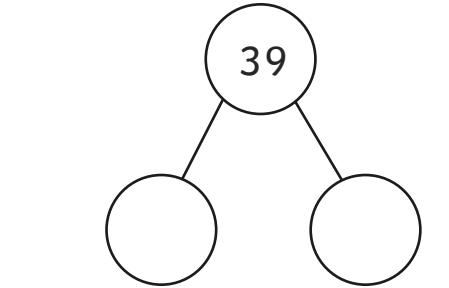
Write number sentences on the boats for the part-whole diagram. Find 2 different ways to complete the other part whole diagrams and write sentences to match them. Get your partner to use equipment to check your number sentences.



$$\text{Boat} \times = \boxed{\phantom{00}}$$



$$\text{Boat} \times = \boxed{\phantom{00}}$$



$$\boxed{\phantom{00}} = \text{Boat} \times$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} = \text{Boat} \times$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} = \text{Boat} \times$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\text{Boat} \times = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} = \text{Boat} \times$$

Use equipment to explain why addition is commutative.

Use equipment to explain why subtraction is not commutative.



# Answers

These number sentences have been turned around but some of them are now incorrect! Put a cross through the number sentences that are incorrect. Use equipment to explain how you know. Write in the correct number sentence to complete the fact family.

$$\cancel{54 - 36 \times} = 90$$

$$46 + 28 \times = 74$$

$$35 + 29 \times = 64$$

$$36 + 54 \times = 90$$

$$74 - 28 \times = 46$$

$$64 - 29 \times = 35$$

$$54 + 36 \times = 90$$

$$46 - 74 \times = 28$$

$$29 + 35 \times = 64$$

$$90 - 54 \times = 36$$

$$28 + 46 \times = 74$$

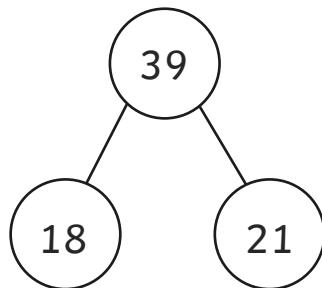
$$35 - 64 \times = 29$$

$$90 - 36 = 54$$

$$74 - 46 = 28$$

$$64 - 35 = 29$$

Write number sentences on the boats for the part-whole diagram. Find 2 different ways to complete the other part whole diagrams and write sentences to match them. Get your partner to use equipment to check your number sentences.



$$18 + 21 \times = 39$$

$$21 + 18 \times = 39$$

$$39 - 18 \times = 21$$

$$39 - 21 \times = 18$$

Other sentences will vary depending on the numbers chosen.