

Yr 6 More Place Value, Addition and Subtraction

Unit 4 (6473)

Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Order of operations including brackets Sheet 1

Working towards ARE / Working at ARE

Day 1 Order of operations including brackets Sheet 2

Working at ARE / Greater Depth

Day 2 More practice with order of operations and brackets Sheet 1

Working towards ARE (with support)

Working at ARE complete 1-8

Greater Depth complete 1-8 and the challenge

Day 3 Word problems Sheet 1

Working towards (with support)

Working at ARE / Greater Depth

Order of operations, including brackets

Sheet 1

Solve the following, making sure that you work out the answers to the calculations in brackets first, and then multiplication or division before addition or subtraction.

1. $(4 + 6) \div 2$

2. $10 \times (5 - 3)$

3. $20 \div (3 + 2)$

4. $(10 - 8) \times 4$

5. $4 \times 3 - 2$

6. $15 \div 3 + 4$

7. $10 - 3 \times 2$

8. $10 - 6 \div 3$

9. $4 + 2 \times 5$

10. $17 + 12 \div 4$

Challenge

Use the digits 6, 8 and 9 once each, with any combination of operations to give answers -5 and 46. Now make 12 in three different ways...

Order of operations, including brackets

Sheet 2

Solve the following, making sure that you work out the answers to the calculations in brackets first, and then multiplication or division before addition or subtraction.

1. $(20 + 3) \times 10$

2. $20 + 3 \times 10$

3. $20 \times 3 + 10$

4. $20 \times (3 + 10)$

5. $20 \times 3 + 20 \times 10$

6. $(20 - 3) \times (20 + 10)$

7. $20 - 3 + 20 \div 10$

8. $100 \times 5 + \square = 1000$

9. $\square + 60 \div 2 = 100$

10. $50 + 250 \div \square = 100$

Challenge

Place brackets and find T, so that $9 \times T - 8 = 46$

More practice with order of operations and brackets

Sheet 1

Solve these.

Remember the order of operations!

1. $33 + 28 \div 4 - 22 =$

2. $72 - 5 \times 7 + 13 =$

3. $(12 + 16) \div 4 \times 5 + 1 =$

4. $(7 + 13) \times (17 - 9) =$

Rewrite these number sentences. Add brackets in a different colour to make them correct.

5. $7 + 17 \div 2 - 1 = 11$

6. $5 + 56 \div 4 + 4 = 12$

7. $11 + 9 \div 4 = 54 \div 6 - 4$

8. $73 - 27 \div 3 = 11 + 5 \times 4$

Challenge

Last year, Edwin counted 16 different wildflower species in his garden. This year he has counted half as many. He decides to plant 9 new ones. Write a number sentence to show how many wild flowers will be growing there this year.

Word problems

Sheet 1

1. Matt the baker has 8 packs of buns. He's baked 40 more and puts these into packs of 4. How many packs does he have now?
2. Sasha the baker has 8 buns left. She bakes 40 more and then puts all the buns into packs of 4. How many packs does she have?
3. Five books priced £11.99 are ordered from an internet site. Postage and packaging costs £3.95 for the total order. What is the total cost?
4. Five books are ordered from an internet site. The original price was £11.99 but they have been discounted by £3 each. The postage and packaging is free. What is the total cost?
5. Zak, his brother and his sister clean their Mum's car. She gives them £7.50 to share equally between them. He also mows the lawn and is given £3.50. How much has Zak earned?
6. The school secretary orders 36 exercise books for 57p each and 36 books for 38p each. How much will the total order cost?

Challenge

Matt has £1000 in savings.

Each week in February he has to spend £145 from this account.

He does some child care to earn money and gets paid £75 at the end of the month.

How much does he have in his savings account on February 28th?

Write a number sentence which uses brackets to represent this information.

Make a word problem of your own which results in a number sentence where brackets have to be used.

More place value, addition and subtraction

Answers

Day 1 Order of operations, including brackets Sheet 1

- $(4 + 6) \div 2 = 5$
- $10 \times (5 - 3) = 20$
- $20 \div (3 + 2) = 4$
- $(10 - 8) \times 4 = 8$
- $4 \times 3 - 2 = 10$
- $15 \div 3 + 4 = 9$
- $10 - 3 \times 2 = 4$
- $10 - 6 \div 3 = 8$
- $4 + 2 \times 5 = 14$
- $17 + 12 \div 4 = 20$

Challenge

$$9 - 6 - 8 \text{ or } 9 - (6 + 8) = -5$$
$$(9 \times 6) - 8 = 46$$
$$9 \div 6 \times 8 = 12; 8 \div 6 \times 9 = 12;$$
$$8 \times 9 \div 6 = 12$$

Day 1 Order of operations, including brackets Sheet 2

- $(20 + 3) \times 10 = 230$
- $20 + 3 \times 10 = 50$
- $20 \times 3 + 10 = 70$
- $20 \times (3 + 10) = 260$
- $20 \times 3 + 20 \times 10 = 260$
- $(20 - 3) \times (20 + 10) = 510$
- $20 - 3 + 20 \div 10 = 19$
- $100 \times 5 + 500 = 1000$
- $70 + 60 \div 2 = 100$
- $50 + 250 \div 5 = 100$

Challenge

$$(9 \times 6) - 8 = 46, \text{ so } T = 6$$

Day 2 More practice with order of operations and brackets Sheet 1

- $33 + 28 \div 4 - 22 = 18$
- $72 - 5 \times 7 + 13 = 50$
- $(12 + 16) \div 4 \times 5 + 1 = 36$
- $(7 + 13) \times (17 - 9) = 160$
- $(7 + 17) \div 2 - 1 = 11$
- $5 + 56 \div (4 + 4) = 12$
- $(11 + 9) \div 4 = 54 \div 6 - 4$
- $73 - (27 \div 3) = (11 + 5) \times 4$

Challenge

Last year, Edwin counted 16 different wildflower species in his garden. This year he has counted half as many. He decides to plant 9 new ones. Write a number sentence to show how many wild flowers will be growing there this year.

$$(16 \div 2) + 9 = 17 \text{ species of wildflowers.}$$

Day 3 Word problems Sheet 1

- Matt has 18 packs of buns now.
- Sasha has 12 packs of buns.
- The total cost of the order is £63.90.
- The total cost of the order is £44.95.
- Zak has earned £7.25 in total.
- The total order will cost £34.20.

More place value, addition and subtraction

Answers

Day 3 Word problems Sheet 1 continued

Challenge

Matt has £1000 in savings.

Each week in February he has to spend £145 from this account.

He does some child care to earn money and gets paid £75 at the end of the month.

How much does he have in his savings account on February 28th? **£495**

Write a number sentence which uses brackets to represent this information.

$1000 - (4 \times 145) + 75$

Make a up a word problem of your own which results in a number sentence where brackets have to be used.