MEMORANDUM

Name: ..... Class: .....

Date: .....

MARK ____ / 10

Answer all questions. Show all your working — marks are awarded for method as well as the final answer. **Teacher copy: accept any correct equivalent method.**

1 Name the property: $(-6) \times 3 = 3 \times (-6)$ (1)

> **Commutative** property of multiplication ✓ (1)

2 Name the property: $(2 + (-5)) + 4 = 2 + ((-5) + 4)$ (1)

> **Associative** property of addition ✓ (1)

3 Name the property: $(-2) \times (7 + 3) = (-2) \times 7 + (-2) \times 3$ (1)

> **Distributive** property ✓ (1)

4 Use the distributive property to calculate $(-5) \times (20 + 3)$. (2)

> $(-5)(20) + (-5)(3) = -100 + (-15) = \mathbf{-115}$ ✓✓ (2)

5 Write down the additive inverse of -11. (1)

> **11** (because $-11 + 11 = 0$) ✓ (1)

6 Write down the additive inverse of 8. (1)

> **-8** ✓ (1)

7 Write down the multiplicative inverse of -6. (1)

> $-\frac{1}{6}$ (because $-6 \times -\frac{1}{6} = 1$) ✓ (1)

8 Is subtraction commutative? Give an example to justify your answer. (2)

> **No** — e.g. $5 - 3 = 2$ but $3 - 5 = -2$, so the order matters. ✓✓ (2)

TOTAL: 10 marks

© Danemathics — free to print and share for classroom use.