

Teacher Mark Scheme 1



Count

- | | | |
|---------|---------|---------|
| 1. 4°C | 2. 8°C | 3. 8°C |
| 4. 12°C | 5. 8°C | 6. 12°C |
| 7. 10°C | 8. 15°C | 9. 16°C |

Find the Difference 1

- | | | |
|---------|---------|---------|
| 1. 9°C | 2. 7°C | 3. 8°C |
| 4. 14°C | 5. 9°C | 6. 13°C |
| 7. 16°C | 8. 20°C | 9. 24°C |

Find the Difference 2

- | | | |
|---------|---------|---------|
| 1. 27°C | 2. 39°C | 3. 43°C |
| 4. 48°C | 5. 54°C | 6. 85°C |
| 7. 97°C | 8. 76°C | 9. 76°C |

Increases and Decreases

A.

- | | | | |
|---------|---------|---------|---------|
| 1. -9°C | 2. -3°C | 3. -4°C | 4. -7°C |
|---------|---------|---------|---------|

B.

- | | | | |
|--------|--------|--------|---------|
| 1. 5°C | 2. 1°C | 3. 4°C | 4. 11°C |
|--------|--------|--------|---------|

C.

- | | | | |
|---------|--------|---------|---------|
| 1. -4°C | 2. 2°C | 3. -4°C | 4. -8°C |
|---------|--------|---------|---------|

D.

- | | | | |
|----------|--------|---------|--------|
| 1. 10 °C | 2. 3°C | 3. -1°C | 4. 7°C |
|----------|--------|---------|--------|

Problems

- | | | | |
|-------------------------|------------------------|-------------------------|-----------------------|
| 1. a) 20°C
b) -3°C | 2. a) 17°C
b) -20°C | 3. a) 12°C
b) 2°C | 4. a) 39°C
b) -3°C |
| 5. a) 15°C
b) -14 °C | 6. a) 50°C
b) 17 °C | 7. a) 60°C
b) -48 °C | |

Teacher Mark Scheme 2



Understand subtracting negative and positive numbers

<u>Adding a Positive</u>	<u>Adding a Negative</u>	<u>Subtracting a Positive</u>	<u>Subtracting a Negative</u>
$(+4) + (+5) = +9$	$(+4) + (-5) = -1$	$(+4) - (+5) = -1$	$(+4) - (-5) = +9$
$(+6) + (+2) = +8$	$(+6) + (-2) = +4$	$(+6) - (+2) = +4$	$(+6) - (-2) = +8$
$(+3) + (+1) = +4$	$(+3) + (-1) = +2$	$(+3) - (+1) = +2$	$(+3) - (-1) = +4$
$(+7) + (+8) = +15$	$(+7) + (-8) = -1$	$(+7) - (+8) = -1$	$(+7) - (-8) = +15$
$(+2) + (+3) = +5$	$(+2) + (-3) = -1$	$(+2) - (+3) = -1$	$(+2) - (-3) = +5$
$(+9) + (+7) = +16$	$(+9) + (-7) = +2$	$(+9) - (+7) = +2$	$(+9) - (-7) = +16$

Adding a positive is the same as addition

Adding a negative is the same as subtraction

Subtracting a positive is the same as subtraction

Subtracting a negative is the same as addition

If they're the **same**, then **add**.

If they're **different**, then **subtract**.

$(+5) + (-7) = -2$	$(+1) - (-9) = +10$	$(+12) + (-11) = +1$	$(+7) - (+3) = +4$
$(+11) - (-3) = +14$	$(+4) - (+6) = -2$	$(+8) - (+8) = 0$	$(+17) - (-12) = +29$
$(+8) + (-3) = +5$	$(+15) + (+3) = +18$	$(+6) + (+7) = +13$	$(+5) + (-13) = -8$
$(+9) - (+6) = +3$	$(+2) + (-5) = -3$	$(+7) - (-9) = +16$	$(+17) - (+14) = +3$
$(+2) - (+6) = -4$	$(+5) - (-9) = +14$	$(+9) + (+2) = +11$	$(+16) + (+13) = +29$
$(+13) + (+3) = +16$	$(+10) - (-4) = +14$	$(+3) + (-9) = -6$	$(+19) + (-22) = -3$