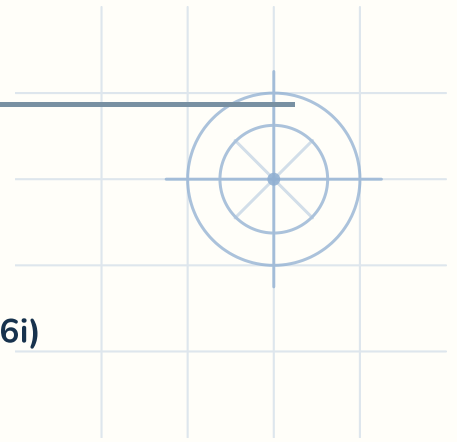


Complex numbers — All three

Name: _____

Date: _____

Work out each one. Give every answer as $a + bi$.



1 $(3 - 5i) + (6 - 6i)$

2 $(3 - 5i)(6 - 6i)$

3 i^{13}

4 $(3 + 3i) - (2 + 3i)$

5 $(2 + 2i)(-4 - 2i)$

6 $(2 - 6i) - (6 + i)$

7 $(-5 + 2i) - (-4 - 2i)$

8 $(5 - 2i)(-3 + 5i)$

9 $(4 + 4i) + (2 - 4i)$

10 i^{22}



Complex numbers · All three — Answer key

1. $(3 - 5i) + (6 - 6i) = 9 - 11i$

2. $(3 - 5i)(6 - 6i) = -12 - 48i$

3. $i^{13} = i$

4. $(3 + 3i) - (2 + 3i) = 1$

5. $(2 + 2i)(-4 - 2i) = -4 - 12i$

6. $(2 - 6i) - (6 + i) = -4 - 7i$

7. $(-5 + 2i) - (-4 - 2i) = -1 + 4i$

8. $(5 - 2i)(-3 + 5i) = -5 + 31i$

9. $(4 + 4i) + (2 - 4i) = 6$

10. $i^{22} = -1$

