

## Answers to Worksheet 36 - Lesson 91 & 92

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|---|--|--|
| 1) Common Ratio: $r = 5$<br>$a_8 = 312500$<br>Explicit: $a_n = 4 \cdot 5^{n-1}$     | 2) Common Ratio: $r = 2$<br>$a_8 = 128$<br>Explicit: $a_n = 2^{n-1}$       | 3) Common Ratio: $r = -5$<br>$a_8 = -312500$<br>Explicit: $a_n = 4 \cdot (-5)^{n-1}$ |
| 4) Common Ratio: $r = -4$<br>$a_8 = 32768$<br>Explicit: $a_n = -2 \cdot (-4)^{n-1}$ | 5) Common Ratio: $r = -3$<br>$a_8 = 2187$<br>Explicit: $a_n = -(-3)^{n-1}$ | 6) Common Ratio: $r = -4$<br>$a_8 = 16384$<br>Explicit: $a_n = -(-4)^{n-1}$          |
| 7) $a_8 = -312500$<br>Explicit: $a_n = 4 \cdot (-5)^{n-1}$                          | 8) $a_8 = -559872$<br>Explicit: $a_n = -2 \cdot 6^{n-1}$                   | 9) $-6, -18, -54, -162$  |
| 10) $6, 36, 216, 1296$  | 11) $\frac{3}{10}$   | 12) $\frac{13}{50}$  |
| 14) $\frac{1}{2}$   | 15) $\frac{7}{12} \approx 0.583$   | 16) $\frac{2}{3} \approx 0.667$  |