

For each of the recursions below, state its solution where  $T(n) = 1$  for  $n \leq 1$ .

	$\Theta(\log n)$	$\Theta(\sqrt{n})$	$\Theta(n)$	$\Theta(n \log n)$	$\Theta(n^2)$	$\Theta(n^2 \log n)$	$\Theta(n^3)$
$T(n) = T(n/3) + 2$	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 2 \cdot T(n/4) + 1$	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 3 \cdot T(n/4) + n$	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 4 \cdot T(n/2) + n^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

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$T(n) = 3 \cdot T(n/9) + 1$	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 3 \cdot T(n/4) + n^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>
$T(n) = T(n - 1) + \log n$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = T(n - 1) + 2$	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 2 \cdot T(n/4) + 3$	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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$T(n) = 9 \cdot T(n/3) + 1$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>
$T(n) = T(n/2) + 5$	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 9 \cdot T(n/3) + n^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>
$T(n) = 4 \cdot T(n/5) + n$	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 4 \cdot T(n/5) + n^3$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓

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$T(n) = 2 \cdot T(n/4) + 1$	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = T(n-1) + n^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓
$T(n) = 3 \cdot T(n/9) + 3$	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 3 \cdot T(n/4) + n$	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$T(n) = 4 \cdot T(n/5) + n^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> ✓	<input type="radio"/>	<input type="radio"/>