1-1. Identify the number specified by the specifying phrase $-7(7 - 10)$

1-2. Identify the number specified by the equation $-3x + 21 = -7x + 1$

1-3. Given the following quantitative ruler,

which of the following bunches of numbers, if any, is(are) all *bounded numbers*?

M. $+0.01, +0.02, +0.03, +0.04, +0.05, +0.06, +0.07$
N. $-0.01, 0.00, +0.03, +0.05$
O. $-0.05, -0.03, -0.01, +0.01, +0.03$
P. $+0.09, +0.11, +0.05, +0.13, +0.15, +0.17$

1-4. Given the following quantitative ruler,

which of the following bunches, if any, is (are) all *offscreen numbers*?
M \(-1, -0.5\)
N \(-2, 0, +1\)
O \(-2\)
P \(-1, +1\)

1-5. Given the following quantitative ruler,

\[
\begin{array}{cccccccccccc}
1.5 & 1.6 & 1.7 & 1.8 & 1.9 & 2.0 & 2.1 & 2.2 & 2.3 & 2.4
\end{array}
\]

which of the following bunches of numbers, if any, is (are) all finite numbers?

M \(+1, +2, +3, +4\)
N \(+1.8, +2.4\)
O \(-2\)
P \(+1.68, +1.69\)

1-6. Which of the following phrases specify a function?

\[
\begin{align*}
x \stackrel{M}{\longrightarrow} M(x) &= \text{Mother of } x \\
x \stackrel{N}{\longrightarrow} N(x) &= \text{Sister of } x \\
x \stackrel{O}{\longrightarrow} O(x) &= \text{Daughter of } x \\
x \stackrel{P}{\longrightarrow} P(x) &= \text{Boss of } x
\end{align*}
\]
1-7. Which of the following *tabular relations*, if any, is/are function(s)?

<table>
<thead>
<tr>
<th></th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
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<td>−56</td>
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<tr>
<td></td>
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<tr>
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<td>−675</td>
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<tr>
<td></td>
<td>−123</td>
<td>+43</td>
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<table>
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<th>Output</th>
</tr>
</thead>
<tbody>
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<table>
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<td></td>
<td>+20</td>
<td>−20</td>
</tr>
</tbody>
</table>

1-8. Which of the following input-output rules specifies a *function*?

\[
x \xrightarrow{M} M(x) = -x
\]

\[
x \xrightarrow{N} N(x) = \text{Number at a distance } x \text{ from } 0
\]

\[
x \xrightarrow{O} O(x) = \pm x
\]

\[
x \xrightarrow{P} P(x) = +x
\]