| In problems 1-8, use the given graph of the function $f$ |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Is $f$ increasing or decreasing on the interval $(-8,-2) ?$ |  |  |  |  |  |
| 2 | Is $f$ increasing or decreasing on the interval $(2,5) ?$ |  |  |  |  |  |
| 3 | List the interval(s) on which $f$ is increasing. Justify your answer. |  |  |  |  |  |
| 4 | List the interval(s) on which $f$ is decreasing. Justify your answer. |  |  |  |  |  |
| 5 | Find the domain. |  |  |  |  |  |
| 6 | Find the range. |  |  |  |  |  |
| 7 | Find the $x$-intercepts. |  |  |  |  |  |
| 8 | Find the $y$-intercepts. |  |  |  |  |  |

For problems 9-12, the graph of a function is given. Use the graph to find:
(a) Its domain and range
(b) The $x$ - and $y$-intercepts
(c) The intervals of increase. Justify.
(d) The intervals of decrease. Justify.
(e) The intervals of constant. Justify.
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