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| --- | --- | --- | --- | --- |
| A continuous time signal x(t) has the Fourier transform | X(ω) | = | 1  jω+b |  |

where b is a constant. Determine the Fourier transform for v(t) = x(5t - 4).



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| --- | --- | --- | --- |
| V(ω) | = | 1  jω+5b | e-jω(4/5) |



|  |  |  |  |
| --- | --- | --- | --- |
| V(ω) | = | 1  jω+4b | e-jω(5/4) |



|  |  |  |  |
| --- | --- | --- | --- |
| V(ω) | = | 1  jω+b | e-jω(4/5) |



|  |  |  |  |
| --- | --- | --- | --- |
| V(ω) | = | 1  jω+5b | ejω(4/5) |

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| --- | --- | --- | --- | --- | --- |
| For a discrete-time signal x[n] with the DTFT | X(Ω) | = |  | 1  ejΩ + b |  |

where b is an arbitrary constant compute the DTFT V(Ω) of v[n] = x[n - 5].



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| e-j5Ω  ejΩ - b |



|  |
| --- |
| e-j5Ω  ejΩ + 5b |



|  |
| --- |
| e-j5Ω  ejΩ + b |



|  |
| --- |
| e-j5Ω  ej5Ω + b |